



Dart Hawkesbury  
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Print

# Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
P0041482	ACI001-VC	1	1	Net 30	M1010S.125	1010-1025 Sheet .125 : AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W NO SCALE ON SHEET MINIMUM YIELD TENSILE STRENGTH= 28KSI MINIMUM ULTIMATE TENSILE STRENGTH= 42KSI COLD ROLLED receive sf				32	11/1/2018	32		S123398	Quarantine	10/31/2018	\$ 4.00 / sf	1		\$127.92	Acier Ouellette Inc.
		2			MT-HRS-P-0.625	Hot Rolled Steel Plate 0.625" thk : MATERIAL: HOT ROLLED STEEL PLATE ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018				16		16		S123399	Stock	10/31/2018	\$ 26.76 / sf	1		\$428.20	Acier Ouellette Inc.
		4			M1018R1.625	round bar 1.625 : MATERIAL: AISI 1018- 1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108				12		12		S123481	Stock	10/31/2018	\$ 9.94 / ft	1		\$119.24	Acier Ouellette Inc.
		7			M304R0.313	304 SS Round bar .313 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft						12		S123400	Stock	10/31/2018	\$ 0.91 / ft	1		\$10.92	Acier Ouellette Inc.
		8			M303R0.500	303 Round Bar 0.500" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft				36		36		S123401	Stock	10/31/2018	\$ 2.83 / ft	1		\$102.73	Acier Ouellette Inc.
		9			M303R1.000	303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft						24		S123402	Stock	10/31/2018	\$ 10.15 / ft	1		\$246.02	Acier Ouellette Inc.
		10			M303R0.750	303 Round Bar 0.750 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft						28		S123403	Stock	10/31/2018	\$ 5.41 / ft	1		\$150.02	Acier Ouellette Inc.

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		14			M6061T6R1.000	Round Bar 1.00" : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				20		20		S123404	Stock	10/31/2018	\$ 2.74 / ft	1		\$54.74	Acier Ouellette Inc.
		15			M6061T6R1.125	6061 Round Bar 1.125 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				25		25		S123405	Stock	10/31/2018	\$ 4.64 / ft	1		\$116.10	Acier Ouellette Inc.
		16			M6061T6R1.500	6061-T6 Round Bar 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ-AA-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft				15		15		S123406	Stock	10/31/2018	\$ 6.35 / ft	1		\$95.27	Acier Ouellette Inc.
		18			M6061T6B1.000X3.000	6061T6 Bar 1.000 X 3.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		12		S123407	Stock	10/31/2018	\$ 11.50 / ft	1		\$137.99	Acier Ouellette Inc.
		20			M6061T6B1.000X06.000	6061T6 Bar 1.00 X 6.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				36		36		S123777	Stock	10/31/2018	\$ 28.19 / ft	1		\$1,014.91	Acier Ouellette Inc.

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
		23			M6061T6B0.625X00.625	6061T6 Bar 0.625 X 0.625 : MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		12		S123408	Stock	10/31/2018	\$ 1.54 / ft	1		\$18.49	Acier Ouellette Inc.
		24			M6061T6B2.500X2.500	6061T6 Bar 2.500 X 2.500 : MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				6		6		S123409	Stock	10/31/2018	\$ 28.74 / ft	1		\$172.41	Acier Ouellette Inc.
		25			M6061T6B1.500X2.000	6061-T6 Bar 1.50 X 2.00 : MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft				12		12		S123410	Stock	10/31/2018	\$ 13.97 / ft	1		\$167.63	Acier Ouellette Inc.
		26			M6061T6B2.000X3.000	6061T6 Bar 2.000 X 3.000 : MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft						12		S123411	Stock	10/31/2018	\$ 23.71 / ft	1		\$284.46	Acier Ouellette Inc.
		27			M6061T6A1.000W.125	6061T6 Angle 1.00 X 1.00 X .125W : MATERIAL: 6061-T6/T6510/T6511 ALUMINUM ANGLE AS PER AMS-QQ-A-200/8 receive ft				20		20		S123412	Stock	10/31/2018	\$ 1.05 / ft	1		\$20.90	Acier Ouellette Inc.
		30			MT-4140QT-R4.000	MT-4140 Quenched & Tempered Steel Round Bar 4.000" Dia : AISI 4140 Q&T Round Bar : MATL: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT				4		4		S123413	Stock	10/31/2018	\$ 95.17 / ft	1		\$380.68	Acier Ouellette Inc.

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
		31			MT-HRS-R-6.000	Hot Rolled Steel Round Bar 6.000" Dia. MATERIAL: HOT ROLLED STEEL ROUND BAR ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018				2		2		S123414	Quarantine	10/31/2018	\$ 121.08 / ft	1		\$242.15	Acier Ouellette Inc.
		32			MT-HRS-P-0.625	Hot Rolled Steel Plate 0.625" thk. MATERIAL: HOT ROLLED STEEL PLATE ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018				16		16		S123415	Stock	10/31/2018	\$ 26.76 / sf	1		\$428.20	Acier Ouellette Inc.
		33			M17-4-R0.750	17-4 Round Bar .750 : 17-4 PH / S17400 / TYPE 630 SS ROUND BAR PER AMS 5643/ ASTM A564 GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI receive ft				24		25		S123416	Stock	10/31/2018	\$ 10.96 / ft	1		\$270.46	Acier Ouellette Inc.
										<b>Total:</b>		<b>372</b>								<b>\$3,499.01</b>	

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Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO041482**

**Supplier:** ACI001-VC  
Acier Ouellette Inc.  
935 Boul. Du Havre  
Valleyfield  
QC  
J6S 5L1 Canada  
Phone: 800 667 4248  
Fax: 450 377 5696

**PO No:** PO041482

**PO Date:** 10/26/18

**Due Date:** 11/1/18

**Purchase Order**

**Revision:**

**Revision Date:**

**Ship-To Contact:** Lavoie, Chantal  
Phone: clavoie@dartaero.com

**E-MAILED**  
OCT 26 2018

**Ship To:** 1270 Aberdeen Street  
Hawkesbury  
ON  
K6A 1K7 Canada  
Phone: 613-632-5200

**Via:** Ground

**Pymt Terms:** Net 30

**Freight Terms:**

**Special Comments:** QUOTE NO. SOU0141363

## **Items**

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1		M1010S.125		1010-1025 Sheet .125 : AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W NO SCALE ON SHEET MINIMUM YIELD TENSILE STRENGTH= 28KSI MINIMUM ULIMATE TENSILE STRENGTH= 42KSI COLD ROLLED receive sf	Firmed	-	11/1/18	32 sf	0 sf	32 sf	\$3.9975/sf	\$127.92
2		MT-HRS-P-0.625		Hot Rolled Steel Plate 0.625" thk : MATERIAL: HOT ROLLED STEEL PLATE ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	11/1/18	16 sf	0 sf	16 sf	\$26.7625/sf	\$428.20
3		M1018B0.625X10.000		1010-1025 Steel Bar .625 X 10.000 : MATERIAL: AISI 1010- 1025 OR ASTM A36/A366/A569/A570 OR OR CSA G40-21 38W/44W/50W/60W/70W CSA G40-21 OR 38W/44W/50W/60W/70W receive ft	Firmed	-	11/1/18	4 ft	0 ft	4 ft	\$80.00/ft	\$320.00
4		M1018R1.625		round bar 1.625 : MATERIAL: AISI 1018- 1025 ROUND BAR M1010S20GA AS PER MIL-S-7097 OR ASTM A108	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$9.936666/ft	\$119.24

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### Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5		M304B0.750X1.000		304 Bar 0.750 X 1.000" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$12.136666/ft	\$145.64
6		M304B1.000X1.250		304 Bar 1.000 X 1.250" : MATERIAL: AISI 304/316 SS BAR OR AISI 304/316 SS PLATE AS PER ASTM A276 OR ASTM A240 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$20.227/ft	\$242.72
7 ✓ AT		M304R0.313		304 SS Round bar .313 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$0.91/ft	\$10.92
8 ✓ AT		M303R0.500		303 Round Bar 0.500" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	36 ft	0 ft	36 ft	\$2.834/ft	\$102.02
9 ✓ AT		M303R1.000		303 Round Bar 1.00 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	24 ft	0 ft	24 ft	\$10.145/ft	\$243.48
10 ✓ AT		M303R0.750		303 Round Bar 0.750 : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	24 ft	0 ft	24 ft	\$5.406/ft	\$129.74
11		M303B1.000X03.000		303 Bar 1" X 3" : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$48.785/ft	\$585.42
12		M4130NT0.500W.083		4130 Round Tube .500 X .083W : MATERIAL: AISI 4130N STEEL TUBING AS PER MIL-T-6736 OR AMS 6371/6360/6361/6362 6373/6374 receive ft	Firmed	-	11/12/18	100 ft	0 ft	100 ft	\$14.50/ft	\$1,450.00

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# PURCHASE ORDER

## PO041482

### Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
13		M4130NR0.250		4130 Steel Round Bar .250" : MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft	Firmed	-	11/1/18	24 ft	0 ft	24 ft	\$15.85/ft	\$380.40
14		M6061T6R1.000		Round Bar 1.00" : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	11/1/18	20 ft	0 ft	20 ft	\$2.737/ft	\$54.74
15		M6061T6R1.125		6061 Round Bar 1.125 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	11/1/18	25 ft	0 ft	25 ft	\$4.644/ft	\$116.10
16		M6061T6R1.500		6061-T6 Round Bar 1.50 : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR AS PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117 4128/4115/4116 OR QQ- AA-200/8 OR AMS-QQ-A- 200/8 OR AMS 4160 OR ASTM B221 OR ASTM B221 receive ft	Firmed	-	11/1/18	15 ft	0 ft	15 ft	\$6.351/ft	\$95.27
17		M6061T6S0.875X2.250		6061-T6 SHEET 0.875" thk, 2.250" wide : MATERIAL: 6061- T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A- 250/11 OR AMS-QQ-A- 250/11 OR AMS 4025 OR 4027 OR ASTM B209	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$19.583/ft	\$235.00



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## **Items**

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
18		M6061T6B1.000X3.000		6061T6 Bar 1.000 X 3.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed -		11/1/18	12 ft	0 ft	12 ft	\$11.499166/ft	\$137.99
✓ AC								✓	12ft		At 18/10/31	
19		M6061T6S1.000X3.625		6061T6 SHEET 1.000 X 3.625 : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR 4027 OR ASTM B209	Firmed -		11/1/18	6 ft	0 ft	6 ft	\$39.166/ft	\$235.00
20		M6061T6B1.000X06.000		6061T6 Bar 1.00 X 6.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed -		11/1/18	36 ft	0 ft	36 ft	\$28.192/ft	\$1,014.91
✓ AC								✓	36ft		At 18/10/31	
21		M6061T6S2.500X7.000		6061T6 SHEET 2.500 X 7.000 : MATERIAL: 6061-T6/T62/T651 ALUMINUM SHEET OR PLATE SPECIFICATION: QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR 4027 OR ASTM B209	Firmed -		11/1/18	4 ft	0 ft	4 ft	\$191.25/ft	\$765.00
22		M6061T6B2.500X01.500		6061-T6 Bar 2.50 X 1.50 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed -		11/1/18	36 ft	0 ft	36 ft	\$16.74/ft	\$602.64

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## **Items**

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23		M6061T6B0.625X00.625		6061T6 Bar 0.625 X 0.625 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$1.541/ft	\$18.49
24		M6061T6B2.500X2.500		6061T6 Bar 2.500 X 2.500 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	6 ft	0 ft	6 ft	\$28.735/ft	\$172.41
25		M6061T6B1.500X2.000		6061-T6 Bar 1.50 X 2.00 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$13.969/ft	\$167.63
26		M6061T6B2.000X3.000		6061T6 Bar 2.000 X 3.000 : MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ-A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ-A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	11/1/18	12 ft	0 ft	12 ft	\$23.705/ft	\$284.46
27		M6061T6A1.000W.125		6061T6 Angle 1.00 X 1.00 X .125W : MATERIAL: 6061-T6/T6510/T6511 ALUMINUM ANGLE AS PER AMS-QQ-A-200/8 receive ft	Firmed	-	11/1/18	20 ft	0 ft	20 ft	\$1.045/ft	\$20.90



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### Items

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
28		MT-4140QT-R0.875		AISI 4140 Quenched & Tempered Steel Round Bar 0.875" Dia. : AISI 4140 Q&T Round Bar : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT	Firmed	-	11/1/18	20 ft	0 ft	20 ft	\$4.211/ft	\$84.22
29		MT-4140QT-R2.750		AISI 4140 Quenched & Tempered Steel Round Bar 2.750" Dia. : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT	Firmed	-	11/1/18	15 ft	0 ft	15 ft	\$35.91/ft	\$538.65
30	✓ AC	MT-4140QT-R4.000		AISI 4140 Quenched & Tempered Steel Round Bar 4.000" Dia. : AISI 4140 Q&T Round Bar : MAT'L: AISI 4130 QUENCHED & TEMPERED ROUND BAR AS PER ASTM 4140 QT OR ASTM 4142 QT	Firmed	-	11/1/18	4 ft	0 ft	4 ft	\$95.17/ft	\$380.68
31		MT-HRS-R-6.000		Hot Rolled Steel Round Bar 6.000" Dia. MATERIAL: HOT ROLLED STEEL ROUND BAR ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	11/1/18	2 ft	0 ft	2 ft	\$121.075/ft	\$242.15
32	✓ AC	MT-HRS-P-0.625		Hot Rolled Steel Plate 0.625" thk : MATERIAL: HOT ROLLED STEEL PLATE ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018	Firmed	-	11/1/18	16 sf	0 sf	16 sf	\$26.7625/sf	\$428.20



Dart Aerospace Ltd.  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

# **PURCHASE ORDER** **PO041482**

## **Items**

Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
33 At		M17-4-R0.750		17-4 Round Bar .750 : 17-4 PH / S17400 / TYPE 630 SS ROUND BAR PER AMS 5643/ ASTM A564 GRAIN MUST BE ALONG LENGTH OF BAR MINIMUM YIELD TENSILE STRENGTH = 100 KSI MINIMUM ULTIMATE TENSILE STRENGTH = 150 KSI receive ft	Firmed	-	11/1/18	24 ft	0 ft	24 ft	\$8.2754166/ft	\$198.61
											✓ 24.67 At 18/10/31	

**Grand Total: \$10,078.75**

## **Order Notes**

### **Procurement Quality Clauses**

A005 right of entry  
A012 chemical and physical test report  
A016 personnel qualification  
A017 raw material identification (as applicable)  
A026 certification of material conformance  
A041 quality management system  
A042 dart notification by supplier  
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Plex 10/26/18 12:23 PM dart.lavoie.chantal



**ACIER OUELLETTE INC.**

935, Boul. du H vre  
Salaberry de Valleyfield (Qu bec) J6S 5L1  
T l.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248  
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

**DELIVERY - CLIENT**

Copy

CO00117760

**Billed to**

DART AEROSPACE LTD  
1270 , ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

**Shipped to**

1270 , ABERDEEN ST.  
HAWKESBURY, Ontario, K6A 1K7

Att : LUSSIER T l.: (613) 632-5200 X 730

**Delivery Route** 5

**Customer N **

CLI0001056

**Date**

2018/10/29

**Delivery date****2018/10/30****Your order N **

PO041482

**Processed by**

Denis Quenneville

**Salesman****Carrier**

OUELLETTE VALLEYFIELD

**Credit Terme**

Net 30 Days

**Instruction** F-M

Product Description	Weight	Qty	UM	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
<b>1 HR SHEET 11G (4 X 8)</b> 1225 FEH-11G48 2984 1 FEUILLE 48 X 96 Heat : 152886	160.00	32.00	PI2_\$CLB		1 X 4' X 8'						
<b>2 PLATE 44W 5/8 RANDOM</b> P44-58-V 4128 1 PL. 4' X 4' Heat : 6913D4	408.00	16.00	PI2_\$CLB		4' X 4'		8' X 20'	✓			8' X 16' 4' X 4'
<b>3 ROUND CR 1 5/8 1018 (R)</b> RCR-158 5283 1 X 12' Heat : 41299AG	84.60	12.00	PI_\$CLB		1 X 12'						
<b>4 ROUND SS 5/16 304 (R)</b> RSS-516 5773 1 X Heat : 46862	3.12	12.00	PI_\$CLB		1 X 13'						
<b>5 ROUND SS 1/2 303 (R)</b> RSS-12303 5727 3 X Heat : 891B / 936L	24.01	36.00	PI_\$CLB		3 X 12' 1"						
<b>6 ROUND SS 1 303 (R)</b> RSS-1303 8519 2 X Heat : 923K	64.08	24.00	PI_\$CLB		2 X 12' 1"						
<b>7 ROUND SS 3/4 303 (R)</b> RSS-34303 5761 2 X Heat : 53049	36.05	24.00	PI_\$CLB		1 X 13' 10" 1 X 13' 11"						



Product Description	Qty	Weight	UM	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
<b>8 ROUND ALU 1 6061-T6 *</b> RAL-1 <b>5141</b> 1 X 20' Heat : SXE171894	18.50	20.00	PI_\$CLB		1x20'						
<b>9 ROUND ALU 1 1/8 6061-T6 *</b> RAL-118 <b>5124</b> <del>1 X 20' + 1 X 5'</del> 2 X 10' DC Heat : Z00238076	29.18	<del>25.00</del> 24.00	PI_\$CLB		2x10'						
<b>10 ROUND ALU 1 1/2 6061-T6 *</b> RAL-112 <b>5119</b> 1 X 15' Heat : SXF180601	31.14	15.00	PI_\$CLB		1x15'		cut 20'	✓			1x5'
<b>11 FLAT ALU 1 X 3 6061-T6 *</b> FAL-13 <b>2500</b> 1 X 12' Heat : CN1805548	42.34	12.00	PI_\$CLB		1x12'		cut 20'	✓			1x8'
<b>12 FLAT ALU 1 X 6 6061-T6 *</b> FAL-16 <b>2536</b> 3 X 12' Heat : SXA180811	253.76	36.00	PI_\$CLB		3x12'						
<b>13 SQUARE ALU 5/8 6061-T6 *</b> CAL-58 <b>1793</b> 1 x 12' Heat : 34021	5.51	12.00	PI_\$CLB		1x12'		cut 20'	✓			1x8'
<b>14 SQUARE ALU 2 1/2 6061-T6 *</b> CAL-212 <b>1783</b> 1 x 6' Heat : 39334	44.10	6.00	PI_\$CLB		1x6'		cut 12'	✓			1x6'
<b>15 FLAT ALU 1 1/2 X 2 6061-T6 *</b> FAL-1122 <b>2440</b> 1 X 12' Heat : 17184871A	42.34	12.00	PI_\$CLB		1x12'						
<b>16 FLAT ALU 2 X 3 6061-T6 *</b> FAL-23 <b>2560</b> 1 X 12' Heat : 18020701B	84.67	12.00	PI_\$CLB		1x12'						

Product Description	Qty	Weight	UM	PCS NB			Internal Use Only				
				CMD	EXP	B/O	IN	I	S	C	OUT
<b>17 ANGLE ALU 1 X 1 X 1/8 R 6061-T6 *</b> AAL-1118 <b>1301</b> 1 X 20' Heat: SXF180280 <i>AT</i>	5.62	20.00	PI_\$CLB		1X 20'						
<b>18 ROUND 4140 HEAT TREAT 4 (R)</b> R4140-4H <b>4965</b> 1 X 4' Heat: C149271 <i>AT</i>	176.28	4.00	PI_\$CLB		1X 4'						
<b>19 ROUND CR 6 1018 (R)</b> RCR-6 <b>5354</b> 1 X 2' Heat: 1702492	192.26	2.00	PI_\$CLB		1X 2'						
<b>20 PLATE 44W 5/8 RANDOM</b> P44-58-V <b>4128</b> 1 PL 4' X 4' 6913D4 <i>AT</i>	408.00	16.00	PI2_\$CLB		4'X4'						
<b>21 ROUND SS 3/4 17-4PH NS</b> RSS-34174 <b>9268</b> 2 X Heat: 9SG0264-G5011 <i>AT</i>	36.05	24.00	PI_\$CLB		2X 12'X4"						

**Note : ATTENTION: MILL TEST REQUIS**

**Total Weight (Lbs) : 2 149.61**

**NIR : R-109516-6**

**Conditions :**

All sold and delivered materials remain the property of "Acier Ouellette Inc" until payment is made in full, complete and cashed. All lost materials are at the buyer's expense. The warranty offered by "Acier Ouellette Inc." is the same as offered and honored by the manufacturer and his warranty is transferred by "Acier Ouellette Inc." to the client. The buyer hereby accepts to respect the following conditions: Net 30 days from billing date and the buyer accepts to pay administration charges of 2% per month (24% per annum) on all past due amounts over 30 days. Any default in respect with this contract will lead to payment by acceleration and permits to the seller, at his choice to claim for the balance due or the repossession of the goods sold. All claims must be made within five (5) days with this document enclosed. Any merchandise that has been damaged, cut or modified cannot be returned. All goods returned must be with our authorization and are subject to a 25% restocking charge.

Prepared By :

Verified By :

Delivered By :

Time

Y M D

Customer's Signature

Date

P44-58820

52357 TRA-3457

**ESSAR**  
STEEL

ESSAR STEEL ALGOMA INC., 105 West Street, Sault Ste. Marie, Ontario, Canada P6A 7B4

P44 581V

②

SO No., Item & Date:	8066438 000040 2018/06/18	Shipment No. & Date:	1000301040 2018/09/25	TC No., Date & Time:	ESA-516120 2018/09/27 - 18:30:15											
Sold to Customer Name and Address:	LES ACIER TRANSBEC (1997) LTEE BOULE CORBUSIER #201-4054 LAVAL, Quebec, Canada H7L 5R2	Ship to Customer Name and Address:	LES ACIER TRANSBEC (1997) LTEE BOUL J.F. KENNEDY 22 ST JEROME, Quebec, Canada J7Y 4B6	Customer PO NO./Item:	OU-50966 / 4											
				BOL NO.:	1000301040											
				Cust. Part No.:												
				Carrier:	SLB TRANSIT INC. - 53026 06											
Customer Specification:	HR STEEL PLATE Carbon Multi Cert CSA G40.21 38W 2013 UD#1 05/14 / CSA G40.21 44W 2013 UD#1 05/14 / ASTM A36 (14) / ASME SA36 (2017) As Rolled Std Thickness Tol Structural Steel Top and Bottom Standard Surface Flatness 1/2 A6 Fine Grain Fully Killed															
Supplementary Instructions:	Test Cert 1: parcan@aciertransbec.com Test Cert 2: nathalie.jegault@aciertransbec.com															
Insp T/R :	Test Report As Per Spec				Cust Use : STRUCTURAL STEEL											
ESSAR STEEL ALGOMA INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES. THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ESSAR STEEL ALGOMA INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (706)945-4093 FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT. THIS TEST REPORT HAS BEEN GENERATED BY A COMPUTERIZED SYSTEM AND IS VALID WITHOUT A PHYSICAL SIGNATURE.																
MEETS EN 10204 2004 TYPE 3.1 ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ALGOMA.COM																
ALL HEATS FULLY KILLED. HEATS INDICATED WITH (*) FINE GRAINED. HEATS INDICATED WITH (+) Made in Canada for NAFTA duty preference and NAFTA marking purposes																
Dimensions (T x W x L)	Batch No.	Heat No.-MS	Quantity	No. of Pcs	Dimensions (T x W x L)	Batch No.	Heat No.-MS	Quantity	No. of Pcs							
0.6250" x 96.000" x 240.00"	BH8247A	2871V4-06	4,084 LB	1	0.6250" x 96.000" x 240.00"	BF6951	6913D4-05	8,168 LB	2							
*****CHEMICAL PROPERTIES*****																
Heat No. (wt%)	C	Mn	P	S	Si	Cr	Ni	Cu	Mo	Al	Nb	V	B	Ti	N	DO
2871V4*	0.16	1.19	0.017	0.005	0.286	0.02	0.01	0.02	0.00	0.034	0.000	0.032	0.0000	0.001	0.0025	0.37
6913D4*	0.14	1.14	0.011	0.009	0.318	0.03	0.02	0.03	0.01	0.040	0.000	0.035	0.0001	0.002	0.0032	0.35

Heat: 6913D4

KASHIF REHMAN  
MANAGER METALLURGICAL SERVICES

"WARNING" THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.



ESSAR STEEL ALGOMA INC., 105 West Street, Sault Ste. Marie, Ontario, Canada P6A 7B4

0006

SO No., Item & Date.: 8066438 000040 2018/06/18		Shipment No. & Date.: 1000301040 2018/09/25		TC No., Date & Time.: ESA-515120 2018/09/27 - 18:30:15								
Sold to Customer Name and Address: LES ACIER TRANSBEC (1997) LTEE BOUL LE CORBUSIER #201-4054 LAVAL, Quebec, Canada H7L 5R2		Ship to Customer Name and Address: LES ACIER TRANSBEC (1997) LTEE BOUL J.F. KENNEDY 22 ST JEROME, Quebec, Canada J7Y 4B6		Customer PO NO./Item: OU-50966 / 4 BOL NO.: 1000301040 Cust. Part No.: Carrier: SLB TRANSIT INC. - 53026 06								
Customer Specification: HR STEEL PLATE Carbon Multi Cert CSA G40.21 38W 2013 UD#1 05/14 / CSA G40.21 44W 2013 UD#1 05/14 / ASTM A36 (14) / ASME SA36 (2017) As Rolled Std Thickness Tol Structural Steel Top and Bottom Standard Surface Flatness 1/2 A6 Fine Grain Fully Killed												
Supplementary Instructions: Test Cert 1: parcard@aciertransbec.com Test Cert 2: nathalie.legault@aciertransbec.com												
Insp T/R: Test Report As Per Spec												
ESSAR STEEL ALGOMA INC. HEREBY CERTIFIES THAT THE MATERIAL HEREIN DESCRIBED WAS MADE AND TESTED IN ACCORDANCE WITH THE RULES OF THE SPECIFICATION SHOWN. ALL RESULTS ARE RETAINED IN ACCORDANCE WITH THE COMPANY'S STANDARD RECORD KEEPING PRACTICES. THIS MILL TEST REPORT MAY NOT BE REPRODUCED EXCEPT IN FULL WITHOUT WRITTEN APPROVAL OF ESSAR STEEL ALGOMA INC. IF YOU RECEIVE THIS DOCUMENT AND ARE NOT THE INTENDED RECEIVER, PLEASE CALL (705) 945-4095 FOR INSTRUCTIONS ON METHOD OF DISPOSAL OF DOCUMENT. THIS TEST REPORT HAS BEEN GENERATED BY A COMPUTERIZED SYSTEM AND IS VALID WITHOUT A PHYSICAL SIGNATURE.												
MEETS EN 10204-2004 TYPE 3.1 ISO QUALITY AND ENVIRONMENTAL CERTIFICATES AVAILABLE AT WWW.ALGOMA.COM												
***** MECHANICAL PROPERTIES *****												
Tensile Tests												
Heat No.	Batch No.	SRCE	LAB	GAUGE	COND	METH	DIR	LOC	YIELD(KSI)	TENSILE(KSI)	EL SCALE	ELONG(%)
6913D4	11	166"	ALG	0.6250	AR	.2	T	F	52.0	73.0	8"	26
6913D4	1	166"	ALG	0.6250	AR	.2	T	F	51.0	73.0	8"	26
871V4		166"	ALG	0.6250	AR	.2	T	F	51.0	74.0	8"	27
871V4		166"	ALG	0.6250	AR	.2	T	F	52.0	74.0	8"	27

KASHIF REHMAN  
MANAGER METALLURGICAL SERVICES

**WARNING** THE TEST RESULTS AND VALUES REPORTED HEREIN INDICATE ONLY THAT: (1) THE PARTICULAR STEEL FOR WHICH THIS CERTIFICATE IS ISSUED MEETS THE MINIMUM SPECIFIED YIELD STRENGTH AND (2) THE ANALYSIS AND PHYSICAL PROPERTIES OF SUCH STEEL ARE IN CONFORMANCE WITH THE REQUIREMENTS OF THE SPECIFICATION INDICATED. THE RESULTS OR VALUES REPORTED HEREIN CAN NOT BE USED TO QUALIFY THE STEEL FOR ANY SPECIFICATION OTHER THAN THE ONE INDICATED AND CAN NOT BE RELIED UPON FOR ANY PURPOSE (INCLUDING DESIGN OR CALCULATIONS) AS REPRESENTING THE ACTUAL STRENGTH OF SUCH STEEL.

REV	DESCRIPTION	ECN #	DATE	BY	APPROVED
B	REMOVED LENGTH AND WIDTH DIMENSIONS	17-675	26/09/2017	SAC	WM

## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL:

HOT ROLLED STEEL PLATE

SPECIFICATION:

ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018

PART NUMBER:

MT-HRS-P-[T.TTT]

WHERE T.TTT IS PLATE THICKNESS IN INCHES

EXAMPLE:

MT-HRS-P-0.750

TOLERANCES PER MANUFACTURER SPECIFICATIONS

<b>DART</b> AEROSPACE		<small>Mississauga, Ontario, Canada</small>	
TITLE <b>HOT ROLLED STEEL PLATE</b>			
DWG NO. <b>MT-HRS-P</b>		REV <b>B</b>	
DESIGN BY:	SAC 08/2017	XXX ± .005 FRACTIONS & 1/8	1. DIMENSIONS ARE IN INCHES 2. INTERPRET DIM AND TOL PER 3. DIMENSIONAL LIMITS APPLY 4. AFTER PLATING
DRAWN BY:	SAC 09/27/2017	XX ± .01 ANGLES & 5°	
CHECKED:	VM 09/27/2017	X ± .1 SURFACES ± 125	
MFG. APPR:	DP 09/27/2017	UNLESS OTHERWISE SPECIFIED	
APPROVED:	DP 09/27/2017	ASME Y14.5M-2009	
DATE:	9/27/2017	3. DIMENSIONAL LIMITS APPLY	
SCALE:	NTS	WEIGHT:	N/A
SHEET 1 OF 1			
COPYRIGHT © 2017 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE          USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION          FROM DART AEROSPACE LTD.</small>			



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-HRS-P-0.625  
DATE: 18/10/31

PO / BATCH NO.: P0041482/S123399/S123415

MATERIAL CERT REC'D: Yes  
QUANTITY RECEIVED: 225F  
QUANTITY INSPECTED: 325F  
QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"  
THICKNESS RECEIVED: 0.625"  
SHEET SIZE ORDERED: 4'x4'  
SHEET SIZE RECEIVED: 4'x4'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL PER M-DRAWING	Y (N)	ASTM A36
CORRECT THICKNESS	Y (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	Y (N)	47691304
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____		
DATE: <u>18/10/31</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

5283

RCK-158

51181

TRA-2822

2P



ARANA Y LUPARDO, 2  
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)  
Tfno.: 946480211  
Fax: 946480128  
Email: calpradera@calibradospradera.es  
www.calibradospradera.es

## CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

N° CERTIFICADO / CERTIFICATE NR.: 49935

ALBARAN 49935  
Delivery Note Nr.

CLIENTE LES ACIERS TRANSBEC (1997) LTÉE  
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

PRODUCTO SOLICITADO / PRODUCT ACCORDING ASTM A108

ORDEN PEDIDO Order No.	DESCRIPCION Description	KGS	TOLERANCIA TOLERANCE	ORDEN PEDIDO Order No.	DESCRIPCION Description
PAR-48735	1018 RED. ESTIRADO 41,28 (1 5/8")	1.064	-0,076	140945	41,28
MJP-48737	1018 RED. ESTIRADO 57,15 (2 1/4")	2.102	-0,076	140959	57,15
MJP-48737	1018 RED. TORNEADO 76,20 (3")	900	-0,102	140961	76,20
OU-47949	1018 RED. ESTIRADO 41,28 (1 5/8")	1.064	-0,076	141117	41,28
OU-47949	1018 RED. ESTIRADO 55,56 (2 3/16")	940	-0,076	141118	55,56
VI-48475	1018 RED. ESTIRADO 50,80 (2")	4.020	-0,076	141141	50,80
PAR-48143	1018 RED. ESTIRADO 50,80 (2")	3.042	-0,076	141260	50,80
VI-48475	1018 RED. ESTIRADO 57,15 (2 1/4")	922	-0,076	141140	57,15
PAR-48143	1018 RED. ESTIRADO 57,15 (2 1/4")	920	-0,076	141262	57,15
PAJ-48144	1018 RED. ESTIRADO 57,15 (2 1/4")	2.084	-0,076	141274	57,15
PAR-48143	1018 RED. ESTIRADO 55,56 (2 3/16")	1.876	-0,076	141261	55,56
MJP-48145	1018 RED. ESTIRADO 57,15 (2 1/4")	3.126	-0,076	141284	57,15
MN-48543	1018 RED. ESTIRADO 41,28 (1 5/8")	994	-0,076	141427	41,28
MN-48543	1018 RED. ESTIRADO 57,15 (2 1/4")	922	-0,076	141423	57,15

Composición química de la colada / Chemical Analysis of Heat

MEDIDA Measurement	OF	COLADA Cast Nr.	% C	% Cu	% Mn	% N	% P	% S	% Si
41,28 0,00	140945	41299 AG	0,165	0,090	0,783	0,003	0,020	0,022	0,195
57,15 0,00	140959	41599 AG	0,173	0,132	0,817	0,003	0,010	0,022	0,218
76,20 0,00	140961	42108	0,180	0,230	0,780	0,000	0,015	0,019	0,240
41,28 0,00	141117	41299 AG	0,165	0,090	0,783	0,003	0,020	0,022	0,195
55,56 0,00	141118	41340 IS	0,170	0,000	0,650	0,000	0,013	0,025	0,310
50,80 0,00	141141	42270 IS	0,170	0,000	0,650	0,000	0,015	0,027	0,310
50,80 0,00	141260	42270 IS	0,170	0,000	0,650	0,000	0,015	0,027	0,310
57,15 0,00	141140	41599 AG	0,173	0,132	0,817	0,003	0,010	0,022	0,218
57,15 0,00	141262	41599 AG	0,173	0,132	0,817	0,003	0,010	0,022	0,218
57,15 0,00	141274	42287 IS	0,170	0,000	0,600	0,000	0,011	0,024	0,300
55,56 0,00	141261	41340 IS	0,170	0,000	0,650	0,000	0,013	0,025	0,310
57,15 0,00	141284	42287 IS	0,170	0,000	0,600	0,000	0,011	0,024	0,300
41,28 0,00	141427	41299 AG	0,165	0,090	0,783	0,003	0,020	0,022	0,195
57,15 0,00	141423	41599 AG	0,173	0,132	0,817	0,003	0,010	0,022	0,218

Características mecánicas / Mechanical properties

heat: 41299 AG



ARANA Y LUPARDO, 2  
48490 UGAO-MIRAVALLS/VIZCAYA (SPAIN)  
Tfno.: 946480211  
Fax: 946480128  
Email: calpradera@calibradospradera.es  
www.calibradospradera.es

## CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 49935

ALBARAN 49935  
Delivery Note Nr.

CLIENTE LES ACIERS TRANSBEC (1997) LTÉE  
CUSTOMER

Norma : EN 10277

Productos Calibrados de acero. Condiciones técnicas de suministro.

Norm :

Bright steel products. Technical delivery conditions.

MEDIDA Measurement	OF	COLADA Cast Nr.	Resistencia Tens. strenght N/mm2	Lím.elástico Yield point 0,2% N/mm2	Alargamiento Elongation Lo=50 mm.	Dureza HB Hardness HB
41,28		140945	41299 AG	550,00	0,00	0,00
57,15		140959	41599 AG	457,00	0,00	0,00
76,20		140961	42108	485,00	302,00	0,00
41,28		141117	41299 AG	550,00	0,00	0,00
55,56		141118	41340 IS	0,00	0,00	169,00
50,80		141141	42270 IS	0,00	0,00	139,00
50,80		141260	42270 IS	0,00	0,00	139,00
57,15		141140	41599 AG	457,00	0,00	0,00
57,15		141262	41599 AG	457,00	0,00	0,00
57,15		141274	42287 IS	0,00	0,00	147,00
55,56		141261	41340 IS	0,00	0,00	169,00
57,15		141284	42287 IS	0,00	0,00	147,00
41,28		141427	41299 AG	550,00	0,00	0,00
57,15		141423	41599 AG	457,00	0,00	0,00

Calidad Superficial

DESCRIPCIÓN Description	OF	Clase EN 10277-1

Observaciones: BARRAS DE ACERO ESTIRADAS / TORNEADAS EN FRIO SIN ALEAR

DEPARTAMENTO DE CALIDAD: Certifica que el mencionado producto cumple con las especificaciones del pedido.

QUALITY DEPARTMENT: Certify that the product fulfils the order specifications.

Fecha/Date: 04/12/2017

Firmado: Susana Fernández  
Directora de Calidad



Sistema de  
Gestión  
ISO 9001:2008  
www.tuv.com  
ID: 110506022



# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL AISI 1018-1025 ROUND BAR  
SPECIFICATION: MIL-S-7097 OR ASTM A108  
PART NUMBER: M1018-R[D DDD] WHERE D DDD = DIAMETER IN INCHES  
DIA.

EG. 7/8" ROUND BAR = M1018-R0.875

## TOLERANCES:

PER ASTM A108 AS FOLLOWS:

SIZE TOLERANCE  
UP TO 1.5" INCL. +0.000/-0.002  
OVER 1.5" TO 2.5" INCL. +0.000/-0.003  
OVER 2.5" TO 4.0" INCL. +0.000/-0.004  
OVER 4.0" TO 6.0" INCL. +0.000/-0.005  
OVER 6.0" TO 8.0" INCL. +0.000/-0.006

RELEASED  
2012-09-24

B	REFORMAT	ADD	ASTM A108	ADD	TOLERANCES	CP	12/09/05
A	NEW	ISSUE		DS	01/06/12	DS	
REV.				BY		DATE	
DESIGN	DS						
DRAWN	CP						
CHECKED							
MFG. APPR.							
DE APPR.							
DATE	12.09.05						
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA							
DRAWING NO. M1018-R							
REV. B SHEET 1 OF 1							
TITLE 1018-1025 ROUND BAR							
SCALE NTS							
COPYRIGHT © 2005 BY DART AEROSPACE LTD							

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M101821.625  
 DATE: 1/10/01

PO / BATCH NO.: P0041482/S123481

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 12ft  
 QUANTITY INSPECTED: 12ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.625"  
 THICKNESS RECEIVED: 1.625"  
 SHEET SIZE ORDERED: -  
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASPM A108
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	41299 AG
CORRECT MATERIAL IDENTIFICATION	Y	(N)	
CORRECT M# ON THE MATERIAL	Y	(N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DATE: <u>1/10/01</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

5773

RSS-516

Fidelity C18636

17692

51540

**VIRAJ PROFILES LIMITED****VIRAJ**

Works: SURVEY NO.- 25/1, 25/2, 26 & 34, Village- MAAN, Taluka- PALGHAR, Dist.- THANE, MAHARASHTRA -401 506, INDIA,  
e-mail- vielqc@viraj.com

**TEST CERTIFICATE**

<b>ORDER NO</b>	<b>PACKING LIST NO</b>	<b>INSPECTION NO</b>	<b>DATE</b>
P006160	64/75011211/23	100008823006	05.09.2017
		<b>GRADE</b>	<b>HEAT No</b>
		T-304/304L	46862

**BUNDLE NO :**  
1100756952, 1100756951, 1100756950, 1100756949,

**DESCRIPTION**  
STAINLESS STEEL BRIGHT BARS

**COLD DRAWN POLISHED - 2H**

SIZE	SHAPE	TOLERANCE	LENGTH	PIECES	WEIGHT
5/16"	ROUND	ASTM A484	12' - 14'	1296	4,083.000 LB

**CHEMICAL ANALYSIS**

%C	%Mn	%Si	%S	%P	%Cr	%Ni	%Cu	%Mo	%Co	%N2
0.0150	1.530	0.260	0.0240	0.0340	18.260	8.030	0.680	0.370	0.140	0.08500

**TEST RESULTS**

0.2% yield strength ksi	Tensile Strength ksi	Elongation %	Reduction Of Area %	Hardness BHN	Grain Size NOS
94.0	109.0	43.0	73.0	224.0	7.0

**SPECIFICATION:**

MATERIAL CONFIRMS TO DIN EN 10088-3:2005:WNR 1.4301/1.4307, EN 10222-5 AND EN 10272 COND-A & ASTM A182/A182M-16a, ASTM A276/A276M-17 COND A, ASTM A479/A479M-17 COND A, A193/A193M-16, B8 CL-I, A320/A320M-15a, B8 CL-1, A484 16, A388/A388M-05, ASME SA182-14, SA479-15, SA 193-11 B8 CL-1, SA320-11 B8 CL-1, ASTM A314-2008, IGC SATISFACTORY AS PER ASTM A 262-10 PRACTICE E. AMS 5639H/AMS5647J (EXCEPT MARKING), QQ-S-763F, NACE MR0103-2012, NACE-MR0175/ISO-15156-2015, SAE-AMS-S-7720A, MIL-S-862-B, AISI 304/304L & UNS#S30400/S30403. CERTIFICATION AS PER EN 10204-3.1.

**REMARKS**

MATERIAL IS FREE FROM MERCURY CONTAMINATION, FREE FROM WELD OR WELD REPAIRS, MICRO: FREE FROM CONTINUOUS CARBIDE NETWORK ON GRAIN BOUNDARIES. MACRO: GOOD, MINIMUM SOLUTION ANNEALING TEMPERATURE 1050C, SOAKING TIME 1/2 HRS, WATER QUENCHED. MELT SOURCE: AOD. WE CONFIRM THAT THE MATERIAL HAS BEEN TESTED AND FOUND TO BE FREE FROM RADIOACTIVE CONTAMINATION. COUNTRY OF ORIGIN: INDIA.

We hereby certify that the material described above has been tested and complies with the terms of order/contract.

**WORKS INSPECTOR**  
K R K MURTHY

Heat: 46862

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR  
(NOTE: AISI 303 NOT ACCEPTABLE)

A SPECIFICATION:

ASTM A276

PART NUMBER:

M304R[D.DDD]  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES

EG. 0.75" ROUND BAR = M304R0.750

RELEASED  
07/23/15

B	REFORMAT DATE: ADD SPEC'S (ZN D6-1) REF PAR 08-020A	CP	09.07.15
A	NEW ISSUE	AJS	08.03.03
REV.	DESCRIPTION	BY	DATE
DESIGN	1.55		
DRAWN	99		
CHECKED			
MFG. APPR.	M304R		
APPROVED			
DE APPR.			
DATE	09.07.15		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M304R			
REV. B			
SHEET 1 OF 1			
SCALE			
304/316 ROUND BAR			
NTS			
COPYRIGHT © 2008 BY DART AEROSPACE LTD			



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304R0.313

PO / BATCH NO.: P0041482/S123400

DATE: 18/11/01

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.313"

QUANTITY RECEIVED: 12ft

THICKNESS RECEIVED: 0.313"

QUANTITY INSPECTED: 12ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	(N)	
CORRECT FINISH	(Y)	N	
CORROSION	Y	(N)	
CORRECT GRAIN DIRECTION	(Y)	N	
CORRECT MATERIAL PER M-DRAWING	(Y)	N	ASTM A276
CORRECT THICKNESS	(Y)	N	
PHOTO REQUIRED	Y	(N)	
CORRECT REF # TO LINK CERT	(Y)	N	MT: 46862
CORRECT MATERIAL IDENTIFICATION	Y	(N)	
CORRECT M# ON THE MATERIAL	Y	(N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	(N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	(N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>AT</u>		SIGNED OFF BY: _____	
DATE: <u>18/11/01</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

5727

RSS-12303

52341

20600



North American Stainless Canada Inc.  
/40 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

# METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

(4)

Certificate: 449240, 1

Customer: 007205 001

Date: 9/27/2018 Page: 1

Steel: 303

Finish: CD

Corrosion:

Your Order: 5400400780

NAS Order: PN 0096303 03

Heat Treat Code: 48,866

## PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/18  
AMS 5640V TYPE 1, QQS-764B CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

## REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE  
2011/65/EU.ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BJ7675 7		.5000		1,393	144.00	35	1	

## CHEMICAL ANALYSIS

ANAB, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
891B	US	.037	.10	17.15	.30	1.85	.321	.039	8.48	.032
		S %	SI %							
		.3370	.46							

## MECHANICAL PROPERTIES

Product Id	1 d o i c x	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 2"
BJ7675 7	R L	213.0	84.51	109.52	33.90	35.00

Heat: 891B

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

9/27/2018





North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 449240. 2

Customer: 007205 001

Date: 9/27/2018 Page: 1

Steel: 303

Finish: CD

Corrosion:

Your Order: 5400400780

NAS Order: PN 0096303 03

Heat Treat Code: 48,866

### PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/18  
AMS 5640V TYPE 1, QQS-764B CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

### REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE  
2011/65/EU. RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BJ7675 8		.5000		1,211	144.00	36	1	

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan) ANAB, ISO/IEC 17025, Certificate# L2323  
Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
891B	US	.037	.10	17.15	.30	1.85	.321	.039	8.48	.032
		S %	SI %							
		.3370	.46							

### MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 2"
BJ7675 8	R L	213.0	84.51	109.52	33.90	35.00

Heat: 891B

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

9/27/2018



North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

# METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 449240 3

Customer: 007205 001

Date: 9/27/2018 Page: 1

teel: 303

Finish: CD

Corrosion:

Your Order: 5400400780

NAS Order: PN 0096303.03 Heat Treat Code: 48,866

## PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/18  
AMS 5640V TYPE 1, QOS-764B CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

## REMARKS:

COMPLIES W/REQUIREMENTS OF DfAR 252.225-7009 EU DIRECTIVE  
2011/65/EU. RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BJ7679 9		.5000		900	144.00	37	1	

## CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# L2323  
Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
936L	US	.056	.16	17.16	.28	1.95	.279	.044	8.51	.033
		S %	SI %							
		.3255	.45							

## MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 2"
BJ7679 9	R L	192.0	79.60	104.55	37.01	22.00

heat: 936L

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

9/27/2018





North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 449240, 4

Customer: 007205 001

Date: 9/27/2018 Page: 1

Steel: 303

Finish: CD

Corrosion:

Your Order: 5400400780

NAS Order: PN 0096303 03

Heat Treat Code: 48,866

### PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/18  
AMS 5640V TYPE 1, QQS-764B CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

### REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE  
2011/65/EU.ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BJ7682 4		.5000		977	144.00	38	1	

### CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

ANAB, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
936L	US	.056	.16	17.16	.28	1.95	.279	.044	8.51	.033
		S %	SI %							
		.3255	.45							

### MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 2"
BJ7682 4	R L	192.0	79.60	104.55	37.01	22.00

Heat: 936L

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

9/27/2018

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:  
PART NUMBER:

ASTM A562  
M303R0.750 DIA.

WHERE "D DDD" = DIAMETER IN INCHES  
EG. 0.75" ROUND BAR = M303R0.750

RELEASED  
R 2010-02-02  
NR

B	REFORMAT DWG. ADD SPECS (2N D8-1)	CP	10 01 05
A	NEW ISSUE	DS	01 12 20
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10 01 05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO CANADA			
DRAWING NO. M303R		REV. B	
TITLE 303 ROUND BAR		SHEET 1 OF 1	
SCALE NTS		DATE	
COPYRIGHT © 2001 BY DART AEROSPACE LTD			

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R0.500  
 DATE: 18/11/01

PO / BATCH NO.: P0041482 / S123401

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 36.25 Lt  
 QUANTITY INSPECTED: 36.25 Lt  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500"  
 THICKNESS RECEIVED: 0.500"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A502
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT: 8918 / 936
CORRECT MATERIAL IDENTIFICATION	(Y) N	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>At</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in





North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 449242 4

Customer: 007205 001

Date: 9/27/2018 Page: 1

Steel: 303

Finish: CD

Corrosion:

Red Ratio: 69.4 :1

Your Order: 5400400780

NAS Order: PN 0096303 01

Heat Treat Code: 48,998

### PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/18  
AMS 5640V TYPE 1, QQS-764B CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

### REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE  
2011/65/EU. RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BJ7983 2		1.0000		1,199	144.00	39	1	

### CHEMICAL ANALYSIS

ANAB, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/14a

NAS-Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
923K	US	.046	.12	17.18	.37	1.88	.324	.028	8.57	.033
		S %	SI %							
		.3250	.52							

### MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BJ7983 2	R L	206.0	79.74	103.10	31.50	21.88

Heat 923K

IAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

9/27/2018



North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 449242 5

Customer: 007205 001

Date: 9/27/2018 Page: 1

Steel: 303

Finish: CD

Corrosion:

Red Ratio: 69.4 :1

Your Order: 5400400780

NAS Order: PN 0096303 01

Heat Treat Code: 48,998

### PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/18  
AMS 5640V TYPE 1, QQS-764B CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

### REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE  
2011/65/EU. RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BJ7983 3		1.0000		1,099	144.00	40	1	

ANAB, ISO/IEC 17025, Certificate# L2323

### CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
923K	US	.046	.12	17.18	.37	1.88	.324	.028	8.57	.033
		S %	SI %							
		.3250	.52							

### MECHANICAL PROPERTIES

Product Id	1 d o i c r	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BJ7983 3	R L	206.0	79.74	103.10	31.50	21.88

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

9/27/2018



North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 449242 6

Date: 9/27/2018 Page: 1

Customer: 007205 001

Steel: 303

Finish: CD

Your Order: 5400400780

NAS Order: PN 0096303 01

Heat Treat Code: 48,998

Corrosion:

Red Ratio: 69.4 :1

### PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/18  
AMS 5640V TYPE 1, QQS-764B CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

### REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE  
2011/65/EU.ROHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BJ7983 4		1.0000		1,029	144.00	41	1	

### CHEMICAL ANALYSIS

ANAB, ISO/IEC 17025, Certificate# L2323

Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
923K	US	.046	.12	17.18	.37	1.88	.324	.028	8.57	.033
		S %	SI %							
		.3250	.52							

### MECHANICAL PROPERTIES

Product Id	l o a d	HB	.2YS	UTS	RA	Elong
	c r	No.	KSI	KSI	%	% 4D
BJ7983 4	R L	206.0	79.74	103.10	31.50	21.88

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

9/27/2018



North American Stainless Canada Inc.  
740 Imperial Road North  
Guelph, ON N1K1Z3  
Canada

## METALLURGICAL TEST REPORT

6870 Highway 42 East  
Ghent, KY 41045-9615  
(502) 347-6000

Certificate: 449242 7

Customer: 007205 021

Date: 9/27/2018 Page: 1

Steel: 303

Finish: CD

Corrosion:

Red Ratio: 69.4 :1

Your Order: 5400400780

NAS Order: PN 0096303 01

Heat Treat Code: 48,998

### PRODUCT DESCRIPTION:

Round Bar, Annealed, Cold Draw  
UNS 30300, ASTM A582/17 EN 10204 3.1, ASTM A484/18  
AMS 5640V TYPE 1, QQS-764B CONDITION A  
SOLUTION ANNEAL TEMP 1900F MIN, ASTM F899/12B

### REMARKS:

COMPLIES W/REQUIREMENTS OF DFAR 252.225-7009 EU DIRECTIVE  
2011/65/EU. RoHS. EAF+AOD+CC. NO WELD REPAIR. MELTED AND MFG  
IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BJ7983 5		1.0000		1,097	144.00	42	1	

### CHEMICAL ANALYSIS

ANAB, ISO/IEC 17025, Certificate# L2323

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Chemical Analysis per ASTM A751/14a

NAS Heat	CM	C %	CO %	CR %	CU %	MN %	MO %	N %	NI %	P %
923K	US	.046	.12	17.18	.37	1.88	.324	.028	8.57	.033
		S %	SI %							
		.3250	.52							

### MECHANICAL PROPERTIES

Product Id	l o c	d i c	HB No.	.2YS KSI	UTS KSI	RA %	Elong % 4D
BJ7983 5	R	L	206.0	79.74	103.10	31.50	21.88

IAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical  
Dept. Mgr.

KRIS LARK

9/27/2018

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:

PART NUMBER: M303R0.000  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES  
EG. 0.75" ROUND BAR = M303R0.750

RELEASED  
2010-02-02  
MRO

B	REFORMAT DWG. ADD SPECS (ZK D8-1)	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO.		REV. B	
M303R		SHEET 1 OF 1	
TITLE		SCALE	
303 ROUND BAR		NTS	
COPYRIGHT © 2001 BY DART AEROSPACE LTD			



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303R 1.000  
 DATE: 18/11/01

PO / BATCH NO.: P0041482/S023402

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 24.25ft  
 QUANTITY INSPECTED: 24.25ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.000"  
 THICKNESS RECEIVED: 1.000"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A582
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT: 923K
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

5761

RSS-34303

51361

17303



# INSPECTION CERTIFICATE

WALSH LINDA CORP.

TAIPEI PLANT  
NO. 5-10, SHILUO LIAO, CHEN SHEN LI,  
TAIPEI DIST TAIPEI CITY 11540, TAIWAN, R.O.C.  
TEL: 886-4-632-0111 FAX: 886-4-632-0234

CUSTOMER : TA CHEN INTERNATIONAL, INC.COMMODITY: Stainless Steel Cold Drawn Round Bar(3)CERTIFICATE NO: A1711280262ORDER NO.: 106090007/268460SPECIFICATION: 303

DOC No.1

LC NO: NRSUPPLY CONDITION: CDDATE OF ISSUE: 2017/11/28

Heat No		Thick (Dia)	Pcs	Wt (LBS)	Chemical Composition(wt%)												Mechanical Property						BOUNCE NO
		(inch)			C x100	Si x100	Mn x100	P x1000	S x1000	Ni x100	Cr x100	Mo x100	Cu x100	N x10000			TS N/mm2	YS N/mm2	EL %	RA %	HRB	HRC	
Spec	Min Max				15	100	200	200	150	800	1700												
5J049		3/4"	69	1254	5.6	27	184	27	328.4	927	1810	11	55	221			710	535	33	46	97		UL17165008
OK597		3/4"	68	1239	5.9	24	193	28	229.4	803	1765	17	74	353			733	603	33	40	95		UL17165009
Total:				2493																			

TOLERANCE: A484

Acc. to ASTM A484-12 Cond.A.

Acc. to ASTM A484 type 1/00-0-7648 chemistry only.

LENGTH TOLERANCE: 0-30

This inspection certificate is issued according to EN 10204 2.2

## Remark:

Melted manufactured : Taiwan , Improved machining.  
Solution annealed treatment: Acc. to ASTM A484.

## SUPPLY CONDITION:

A: Annealed  
B: Shot Blasted  
C: As Casted  
D: Heat Treated  
E: Pickled  
F: Polished  
G: Cold Rolled  
H: Hot Rolled  
I: Straightened  
J: Cut Edge  
K: Polished  
L: Cold Rolled  
M: Pickled  
N: Shot  
O: Shot  
P: Shot  
Q: Shot  
R: Shot  
S: Shot  
T: Shot  
U: Shot  
V: Shot  
W: Shot  
X: Shot  
Y: Shot  
Z: Shot

## We have the following certifications

1. ISO9001:2015 Quality Management System  
2. ISO/IEC 17025:2005 Laboratory Management System  
3. PED & AD2000-Machinery VO  
4. DNV - LR - ABS Classification Society certification  
5. ISO14001:2004 Environment Management System  
6. OHSAS 18001:2007 & TOSHMS Certificate

## TEST METHOD :

CHEMICAL-ASTM E1006, E413, E1006, E1019

**SL Kuan.**

Quality Assurance Responsible Personnel

Heat: 5J049

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS ROUND BAR  
(NOTE: AISI 304/316 NOT ACCEPTABLE)

✓B/ SPECIFICATION:

PART NUMBER: ASTM A582  
M303R(D.DDD)  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES  
EG. 0.75" ROUND BAR = M303R0.750

RELEASED  
2010-02-02  
MPO

B	REFORMAT DWG. ADD SPECS (2N D8-1).	CP	10.01.05
A	NEW ISSUE	DS	01.12.20
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10.01.05		
DART AEROSPACE LTD HAYKESBURY, ONTARIO, CANADA			
DRAWING NO. M303R			
REV. B			
SHEET 1 OF 1			
TITLE 303 ROUND BAR			
SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			



## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M303 R0-750  
 DATE: 10/11/01

PO / BATCH NO.: P0041482/5123403

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 27.75ft  
 QUANTITY INSPECTED: 27.75ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.750"  
 THICKNESS RECEIVED: 0.750"  
 SHEET SIZE ORDERED: -  
 SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> N	ASTM A582
CORRECT THICKNESS	<input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> N	MT: 55044
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>10/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

5141



GLOBAL VIETNAM ALUMINIUM COMPANY LIMITED

Address: MY XUAN B1-CONAC INDUSTRIAL ZONE, MY XUAN TOWN, TAN THANH DISTRICT,  
BA RIA VUNG TAU PROVINCE, VIETNAM

Tel: +84(0)643924954

Fax: +84(0)643924953

RAL-1

50917

CA-50648

15420

## MILL TEST CERTIFICATE

Date: October 29, 2017

PO number: 17-P-565

Shipping Ref No.: 17-2134

LC No.: DC HMN714345

Date of issue: October 24, 2017

Item Code: 1043003

Die Number: D00004

Alloy & Temper: 6061-T6

Production Description: CUSTOM ALUMINIUM EXTRUSION  
Round Bar 1" x 20' 6061-T6

Length (inch): 240

Unit weight (kg/meter): 1.368

Bundle number: 17-P-565-043, 17-P-565-042, 17-P-565-041, 17-P-565-040

Heat Number: SXE171894

Date: 05/10/2017

Applicable Specifications: ASTM B221 STANDARDS

### CHEMICAL ANALYSIS: %

Si	Mg	Fe	Cu	Mn	Cr	Zn	Ti	Al	Other		Remark:
									EACH	TOTAL	
0.662	0.964	0.232	0.247	0.024	0.082	0.009	0.019	97.664	<0.05	<0.10	03/10/2017

### MECHANICAL ANALYSIS:

Ult. Strength (ksi)	Yield Strength (ksi)	Elongation % LN 2"	Remark:
41.7	36.8	12.3	03/10/2017

All profiles, showing material shipped match aluminium alloy as per standard, with chemical analysis to match aluminium alloy standard.

We hereby certify that the item listed have been checked and tested in accordance with the specifications noted and have been found to meet all the applicable requirements. Certifications are kept on file for 36 months from the date of purchase and are available for review upon request, referring to ASTM and the PO number.

Quality Manager



TRUNG TÂM KIỂM NGHIỆM CÔNG TY  
TNHH NHÓM TOÀN CẦU VIỆT NAM  
GLOBAL VIETNAM ALUMINIUM  
CO., LTD TESTING CENTER

heat: SXE 171894

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL 6061-T6/1651/76510/76511/T62 ALUMINUM ROUND BAR  
SPECIFICATION:  
QQ-A-225/8 OR ANS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4180)  
OR ASTM B211 OR ASTM B221  
PART NUMBER: M6061T6R1Q DDD | DIA.

WHERE "D DDD" = DIAMETER IN INCHES  
EG. 5/8" ROUND BAR = M6061T6R0.625

RELEASED  
N 2009-09-09  
NT

B	REFORMAT: QWC, ADD B211 & B221 SPEC (ZIN DB-1), REF PAR 08.03A	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR			
DATE	09.07.13		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. B
DRAWING NO.	M6061T6R	SHEET 1 OF 1
TITLE	6061-T6 ROUND BAR	SCALE
		NTS
COPYRIGHT © 2001 BY DART AEROSPACE LTD		



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061R1.000

PO / BATCH NO.: P0041482 / S123404

DATE: 18/11/01

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.000"

QUANTITY RECEIVED: 20ft

THICKNESS RECEIVED: 1.000"

QUANTITY INSPECTED: 20ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	ASTM B221
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	HT: 58E171894
CORRECT MATERIAL IDENTIFICATION	Y	<input checked="" type="radio"/> N	
CORRECT M# ON THE MATERIAL	Y	<input checked="" type="radio"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AI</u> DATE: <u>18/11/01</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



---

CERTIFICATION DU MATÉRIEL

CLIENT:  
SALABERRY-DE-VALLEYFIELD

ACIER OUELLETTE INC DIV.DE

935 BOUL DU HAVRE  
SALABERRY-DE-VALLEYFIELD, QUEBEC  
QC J6S 5L1

NUMÉRO DE COMMANDE: 14858552 000070  
COMMANDE DU CLIENT: AC00015081  
NUMÉRO DE PIÈCES: 5124  
NUMÉRO DE LIVRAISON: 803622741 000010

NUMÉRO D'ARTICLE: 160001009  
DESCRIPTION INVENTAIRE: RD EXT 6061 T6511 1.125 X 144

DESCRIPTION ARTICLE FINIS: ALUM Barre RD EXT 6061 T6511  
1.125po X 144po

NUMERO (S) DE COULÉE BRAME / BOBINE / TIN (le cas échéant)

Z00238076

K000782772


**CERTIFICATION**

Un sondage de nos sources matérielles a indiqué que ni le mercure ni des substances radioactives ne sont introduits dans leurs produits ni ne sont utilisés dans aucun de leurs procédés. Alors que nous ne faisons aucun test indépendant pour le mercure ou la radiation, il n'y a rien dans le système qui pourrait entraîner la contamination de l'un ou l'autre type.

Ce document certifie que le matériel décrit ci-dessus a été expédié conformément à votre commande. Le producteur du matériel a certifié à qu'il a été produit conformément aux spécifications suivantes:

ASTM B221

04/10/2018

  
Thomas Endres  
Vice-président - Approvisionnement

# 5124

50587

15087

*Best in Class***CERTIFIED TEST REPORT**<http://Online.KaiserAluminum.com>

CUSTOMER PO NUMBER: 4500875969-1		CUSTOMER PART NUMBER: 160001009/EAST		PRODUCT DESCRIPTION: RECISION ROD 1.125+/-0.005	
ORDER NUMBER: 6051071	LINE ITEM: 001	SHIP DATE: 03/30/2018	LOT NUMBER: Z00238076	ALLOY: 6061	TEMPER: T6511B
WEIGHT SHIPPED: 1024.000 LB	QUANTITY: 73.000 PCS	B/L NUMBER: 622323	DIAM/DAF/THKNS:	WIDTH:	LENGTH: 12.000 FT

**Actual Physical Properties**

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CONDUCT.	BEND
Z00238076	0001	0001	49.2	46.4	16.1	RE 93	N/A	N/A
Z00238076	0001	0002	49.0	46.2	16.2	RE 93	N/A	N/A
Z00238076	0001	0003	48.7	45.8	16.0	RE 93	N/A	N/A
Z00238076	0001	0004	49.3	46.5	16.3	RE 92	N/A	N/A

**Chemical Composition (wt%), Aluminum Remainder**

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
108385	.75	.25	.29	.13	.86	.09	.13	.02	.00	.00	.00	.01	.03

**Applicable Requirements:**

PER ASTM-B221-14, STENCILED ASME-SB221 2009 SECT II PER AMS-QQ-A-200/8A UNS# A96061  
 MEETS ALL SPECIFICATION REQUIREMENTS FOR 6061-T6511/T6 ELEVATED MINIMUM MECHANICAL  
 PROPERTIES AS FOLLOWS: UTS = 42.0 KSI MIN YIELD = 38.0 KSI MIN ELONGATION = 10.0% MIN

**Miscellaneous Notes**

MANUFACTURED IN USA MELTED IN USA  
 MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY  
 OF ITS COMPOUNDS ARE UTILITIZED BY KAISER ALUMINUM IN THE MANUFACTURE OF THIS MATERIAL.

**CERTIFICATION**

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been  
 inspected and tested and found in conformance with applicable specifications forming a part of the  
 description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on  
 Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Aimee L. Macnowski, Quality & Technology Manager

*Aimee L. Macnowski*

Plant Serial: 00328214

Order Number: 6051071

Line Item: 001

*Heat: Z00238076*

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6T651/T6510/T651/T62 ALUMINUM ROUND BAR  
SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6R(D.DDD)  
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES  
EG. 5/8" ROUND BAR = M6061T6R0.625

RELEASED  
N 2009-09-09  
MCP

B	REFORMAT, ORIG. ADD B211 & B221 SPEC (ZIN D8-1), REF PAR C8 020A	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6R			
TITLE			
6061-T6 ROUND BAR			
REV. B			
SHEET 1 OF 1			
SCALE			
NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 R1.125  
DATE: 18/11/01

PO / BATCH NO.: P0041482/5123405

MATERIAL CERT REC'D: Yes  
QUANTITY RECEIVED: 246  
QUANTITY INSPECTED: 246  
QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.125"  
THICKNESS RECEIVED: 1.125"  
SHEET SIZE ORDERED: —  
SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM B221
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT 200238076
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



5119

RAL-112

TRA-3365

52211



Global Vietnam Aluminium Co., Ltd. GLOBAL VIETNAM ALUMINIUM COMPANY LIMITED

Address: MY XUAN BI-CONAC INDUSTRIAL ZONE, MY XUAN TOWN, TAN THANH DISTRICT,  
BA RIA VUNG TAU PROVINCE, VIET NAM  
Tel: +84(0)643924954  
Fax: +84(0)643924953

**MILL TEST CERTIFICATE**Date: May 21<sup>st</sup>, 2018

PO number: P-18198  
Shipping Ref No.: 18-0959  
LC No.: DC HMN811713  
Date of issue: May 10, 2018  
Item Code: 1065900  
Die Number: D00186  
Alloy & Temper: 6061-T6  
Production Description: ALUMINIUM EXTRUDED PROFILES  
Round Bar 1-1/2" x 20' 6061-T6 D00186  
Length (inch): 240  
Bundle number: P-18198-067  
Heat Number: SXF180601  
Date: 24/04/2018  
Applicable Specifications: ASTM B221 STANDARDS

RAL112

**CHEMICAL ANALYSIS: %**

Si	Mg	Fe	Cu	Mn	Cr	Zn	Ti	Al	Other		Remark:
									EACH	TOTAL	
0.654	0.984	0.249	0.265	0.024	0.079	0.010	0.019	97.623	<0.05	<0.10	21/04/2018

**MECHANICAL ANALYSIS:**

Ult. Strength (ksi)	Yield Strength (ksi)	Elongation % LN 2"	Remark:
39.6	35.3	10.4	21/04/2018

All profiles, showing material shipped match aluminium alloy as per standard, with chemical analysis to match aluminium alloy standard.

We hereby certify that the item listed have been checked and tested in accordance with the specifications noted and have been found to meet all the applicable requirements. Certifications are kept on file for 36 months from the date of purchase and are available for review upon request, referring to ASTM and the PO number.

Quality Manager



TRUNG TAM KIỂM NGHIỆM CÔNG TY  
TIỀN NHON TAN CAU VIETNAM  
GLOBAL VIETNAM ALUMINIUM  
CO., LTD TESTING CENTER

Heat: SXF180601

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6 / 6061-T6510/T6511/T62 ALUMINUM ROUND BAR  
SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6R(D,DDD)  
| DIA. |  
WHERE "D,DDD" = DIAMETER IN INCHES  
EG. 5/8" ROUND BAR = M6061T6R0.625

RELEASED  
N 2009-09-09  
MP

B	REFORMAT TNG. ADD B211 & B221 SPEC (ZIN DB-1).	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6R			
TITLE 6061-T6 ROUND BAR			
SHEET 1 OF 1			
SCALE NTS			
REV. B			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			

## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 R1.500

PO / BATCH NO.: P0041482/S123466

DATE: 18/11/01

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.500"

QUANTITY RECEIVED: 154

THICKNESS RECEIVED: 1.500"

QUANTITY INSPECTED: 154

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM B221
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	HT: 5XF180601
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.  
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



2500

FAL-13

52225 19986

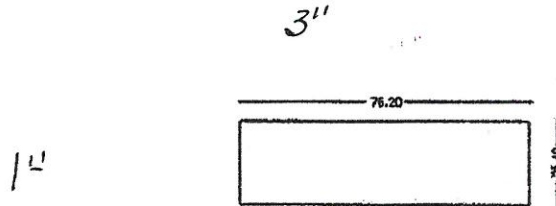

**LB ALUMINIUM BERHAD**  
 (138535-V)


ALUMINIUM EXTRUSION

**MILL CERTIFICATE**

CUSTOMER :	SECTION NO. : PE01419MF06100	DATE : Apr-25-2018
SALES ORDER NO : 1872474	WORK ORDER : 814346	ALLOY : 6061-T6511
PRESS NO. : 3300	EXTRUSION DATE : Apr-20-2018	CERTIFICATE NO. : CN1805548
CUSTOMER PO NO. : P207815		

Section Sketch :



CHEMICAL COMPOSITION										
Composition	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al	Analysis Ref.-
Min	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	Remainder	85186
Max	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15		
Actual	0.679	0.146	0.261	0.046	1.002	0.076	0.005	0.011		Dec-30-2017

Compliance with ASTM B221M-07

We hereby certify that the material covered by this report has been verified or tested according to the supplier standard sampling method or the requirements of any specifications or requirements described herein, and that sample representative of the material met the composition limits. Also, note that mercury is not a normal contaminant in aluminum alloys. Neither mercury nor any of its compounds are used in the manufacture of our extrusion. This certificate conforms to 3.1, EN 10204.

\*\* This certificate of Analysis has been produced electronically and is valid without signature \*\*

Lot 11, Jalan Perusahaan 1, Kawasan Perusahaan Beranang, 43700 Beranang, Selangor Darul Ehsan, Malaysia.

Tel: 603-8725 8822 (15 Lines) Fax: 603-8725 8828 (General), 8725 8833 (Sales), 8725 8866 (Export)

Enquiry@lbalum.com.my www.lbalum.com

Heat: CN1805548



# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:  
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | TTT | X | WW.WWW |  
THICK | WIDTH

WHERE "TTT" = THICKNESS IN INCHES  
"WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
2009-09-03  
MD

B	REMOVE QQ-A-250/11 OPTION REFORMAT NOTES, ADD ASTM B211/B221 (2N D7-1)	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN	DS		
CHECKED	DS		
MFG. APPR.	M6061T6B		
APPROVED	TITLE		
DE APPR.	6061-T6 BAR		
DATE	09 07 13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
REV. B DRAWING NO. M6061T6B SHEET 1 OF 1 SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING.			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 B 1.000 x 3.000

PO / BATCH NO.: P004482/S123407

DATE: 18/11/01

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.000"

QUANTITY RECEIVED: 12 ft

THICKNESS RECEIVED: 1.000"

QUANTITY INSPECTED: 12 ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>ASTM B 221</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>HT: CN1805548</u>
CORRECT MATERIAL IDENTIFICATION	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

2536

FAL-16

52179

CA-50864

16671

Global Vietnam  
Aluminium Co., Ltd

GLOBAL VIETNAM ALUMINIUM COMPANY LIMITED

Address: MY XUAN BI-CONAC INDUSTRIAL ZONE, MY XUAN WARD, PHU MY TOWN,  
BA RIA-VUNG TAU PROVINCE, VIETNAM  
Tel: +84(0)643924954  
Fax: +84(0)643924953

## MILL TEST CERTIFICATE

Date: July 22<sup>nd</sup>, 2018

PO number: P-18239  
Shipping Ref No.: 18-1749  
LC No.: DC HMN812691  
Date of issue: July 18, 2018  
Item Code: 1062500  
Die Number: D00128  
Alloy & Temper: 6061-T6  
Production Description: ALUMINIUM EXTRUDED PROFILES  
Flat Bar 1" x 6" x 144" 6061-T6 D00128  
Length (inch): 144  
Bundle number: P-18239-216  
Heat Number: SXA180811  
Date: 03/07/2018  
Applicable Specifications: ASTM B221 STANDARDS

### CHEMICAL ANALYSIS: %

Si	Mg	Fe	Cu	Mn	Cr	Zn	Ti	Al	Other		Remark:
									EACH	TOTAL	
0.653	0.988	0.218	0.242	0.015	0.056	0.012	0.021	97.687	<0.05	<0.10	30/06/2018

### MECHANICAL ANALYSIS:

Ult. Strength (ksi)	Yield Strength (ksi)	Elongation % LN 2"	Remark:
41.79	36.55	10.8	30/06/2018

All profiles, showing material shipped match aluminium alloy as per standard, with chemical analysis to match aluminium alloy standard.

We hereby certify that the item listed have been checked and tested in accordance with the specifications noted and have been found to meet all the applicable requirements. Certifications are kept on file for 36 months from the date of purchase and are available for review upon request, referring to ASTM and the PO number.

Quality Manager



TRUNG TÂM KIỂM NGHIỆM CÔNG TY  
TNHH NHÔM TOÀN CẦU VIỆT NAM  
GLOBAL VIETNAM ALUMINIUM  
CO., LTD TESTING CENTER

heat: SXA180811

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL 6061-T6 T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:  
 QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
 OR QQ-A-200/8 OR ~~AMS-QQ-A-200/8~~ (OR AMS 4160)  
 OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TTT | X | WW.WWW  
 | THICK | | WIDTH |

WHERE "T.TTT" = THICKNESS IN INCHES  
 "WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

**RELEASED**  
 2009-05-03  
*AM*

B	REMOVE Q/A-225/8 OPTION, REFORMAT NOTIS, ADD ASTM B211/B221 (2N D7-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	RY	DATE
DESIGN	DS		
DRAWN	<i>AS</i>		
CHECKED	<i>AS</i>		
MFG. APPR.	<i>AS</i>		
APPROVED	<i>AS</i>		
DE APPR.	<i>AS</i>		
DATE	09.07.13		

DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO M6061T6B	REV. B
TITLE 6061-T6 BAR	SHEET 1 OF 1
SCALE NTS	

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## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6B1.000X06.000

PO / BATCH NO.: P0041482/S123777

DATE: 18/11/01

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.000"

QUANTITY RECEIVED: 36ft

THICKNESS RECEIVED: 1.000"

QUANTITY INSPECTED: 36ft

SHEET SIZE ORDERED: -

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y N	ASTM B 221
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	LT: SXA 180811
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



1793

CAL-58

51382

TRA-2917

**BON DE LIVRAISON**

**VENDU À**  
 ACIERS TRANSBEC (1997) LTEE  
 4054, BOUL. LE CORBUSIER  
 #201  
 LAVAL, QC  
 H7L 5R2  
 NO CLIENT: 3693

**LIVRÉ À**  
 ACIER OUELLETTE  
 22, BOUL. J-F KENNEDY  
 ST-JEROME, QC J7Y 4B6  
 NO CLIENT: L-3693-3

NO DU BON	DATE DE LIVRAISON
115350	29/Sep/16
NIR: R-015478-2	NO DE TÉLÉPHONE DU CLIENT: 450-963-3693
NO COMMANDE CLIENT: OU-46506	REPRÉSENTANT: Guillaume Morin
CHAUFFEUR: JIMMY AYOTTE	NO COMMANDE 100655

NO. ITEM	NO DE FILIERE	NO PIECE CLIENT	DESCRIPTION ALLIAGE/TREMPAGE	LONGUEUR	FINITION	COMMANDE CLIENT NO. PIÈCES KILOS	AVENIR NO. PIÈCES KILOS	NOTICET NO. PIÈCES KILOS	EN LIVRAISON NO. PIÈCES KILOS	%	OK
31	SA00504		TIGE CARREE 5/8" 6061/T6	6096mm	NATUREL MILL	121 500	0 0 100655-31-1A1	383897	158 654	100.0%	<input type="checkbox"/>
Sous-Total:								1	158 654		

**3 MILLTEST + CERT. CONFORMITE****Mill Test (Tensile Properties of Aluminum)**

Test Date.: 26/Sep/16

Order No.	Alloy	Temper	Yield (ksi)	Ultimate Tensile (ksi)	Total Elongation (%)	Hardness (Rockwell E)	Conductivity %	Report No.
100655-31-1A1	6061	T6	38.2	42.6	15.80	91.70		6178

**Certificate of compliance (Certificat de conformité)**

Normes: (ANSI H35.1-1997) &amp; (ASTM B221)

Order No. Hardness (Webster) Cast No. CAST CHEMICAL COMPOSITION:  
 #1 #2

100655-31-1A	15	15	34021	Al	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co
				97.97	0.58	0.21	0.20	0.08	0.86	0.05	0.00	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

AVISER SANS FAUTE JOCELYN NADEAU 24 HEURES AVANT LA LIVRAISON POUR CONFIRMER AVEC LE CLIENT  
 ATT. EMBALLAGE (POUR ACIER PICARD VARENNES SEULEMENT): DIMENSIONS MAXIMALES DES BUNDLES 22" x 15"  
 ATT. PACKING (FOR ACIER PICARD VARENNES ONLY): BUNDLES MAXIMUM DIMENSIONS 22" x 15"

TOTAL EN LIVRAISON: 2369 13957

25 JFK

VÉRIFICATION DE MATÉRIEL

DATE 30/09/16

VÉRIFIÉ PAR

SIGNATURE

SIGNATURE  
CLIENT:

DATE: 29 SEP. 2016

25

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL (6061-T6) 6061-T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:  
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B T.TTT X THICK WW.WWW  
WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
R 2009-09-03

B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (2N D7-1)	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV.	DESCRIPTION	BY	DATE
DESIGN DRAWN	DS		
CHECKED	AS		
MFG. APPR.	M6061T6B		
APPROVED	TITLE		
DE APPR.	6061-T6 BAR		
DATE	09 07 13		
DART AEROSPACE LTD HAYKESBURY, ONTARIO, CANADA			
REV. B SHEET 1 OF 1 SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD ALL RIGHTS RESERVED. NO PART OF THIS DRAWING IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.			



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M606176B0625X00625  
 DATE: 18/11/21

PO / BATCH NO.: P0041482 / S123408

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 1254  
 QUANTITY INSPECTED: 1254  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625"  
 THICKNESS RECEIVED: 0.625"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>(N)</u>	
CORRECT FINISH	<u>(Y)</u> N	
CORROSION	Y <u>(N)</u>	
CORRECT GRAIN DIRECTION	<u>(Y)</u> N	
CORRECT MATERIAL PER M-DRAWING	<u>(Y)</u> N	<u>ASTM B 221</u>
CORRECT THICKNESS	<u>(Y)</u> N	
PHOTO REQUIRED	Y <u>(N)</u>	
CORRECT REF # TO LINK CERT	<u>(Y)</u> N	<u>HT: 34021</u>
CORRECT MATERIAL IDENTIFICATION	Y <u>(N)</u>	
CORRECT M# ON THE MATERIAL	Y <u>(N)</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>A</u>	SIGNED OFF BY: _____
DATE: <u>18/11/21</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



1783

CAL-212

51861

18931

# MILL TEST

BILL TO	CERT CODE: 9	DIE NUMBER S 4770	DATE OF SHIPMENT Feb/22/2018	ER NO. 214399 — 6	MANIFEST NO. 386480
SHIP TO	CUSTOMER PO C75426	ALLOY 6061	TEMPER T6511	SALESMAN PETER BASHMAKOV	MADE IN CANADA
SO DESCRIPTION 2.5" SQ	CUSTOMER PART NUMBER V823601 ✓	PART DESCRIPTION 2.5" SQ	CERTIFICATION ASTM B221-14 - AMS QQA 200/8 SPECIFICATION Samuel std shapes		

R046261

## Mechanical Properties

Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness Rockwell F	Conductivity
A.11	6061	Feb/15/2018	42.00	39.20	9.80	85.8,86.1,86.4	

## Chemical Composition

Chemical Composition			Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	V	B	Zr	Bi	Pb	Sn	Sr	Co	Al	Other
Cast Number	Lot	Alloy																				
39334	A.11	6061	0.54	0.203	0.2	0.0599	0.868	0.059	0	0.0109	0.0221	0	0	0	0	0	0	0	0	0	Remainder	0

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper specifications.

T. Mohabir

Tulsiram Mohabir  
Quality Control Manager

Heat: 39334

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL (6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:  
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TTT | X | WW.WWW |  
THICK | WIDTH |

WHERE "T.TTT" = THICKNESS IN INCHES  
"WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
R 2009-05-03

B	REMOVE QCA-200/1 (OPTION REFORMAT NOTE'S ADD ASTM B211B221 (2ND P1))	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN			
CHECKED	AS		
MFG. APPR.	M6061T6B		
APPROVED	TITLE		
DE APPR.	6061-T6 BAR		
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
REV B SHEET 1 OF 1			
SCALE NTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD. ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM.			

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6B 2-500x2.500

PO / BATCH NO.: P0041482/S123409

DATE: 18/11/01

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 2.500"

QUANTITY RECEIVED: 64

THICKNESS RECEIVED: 2.500"

QUANTITY INSPECTED: 64

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>(N)</u>	
CORRECT FINISH	<u>(Y)</u> N	
CORROSION	Y <u>(N)</u>	
CORRECT GRAIN DIRECTION	<u>(Y)</u> N	
CORRECT MATERIAL PER M-DRAWING	<u>(Y)</u> N	<u>ASTM B221</u>
CORRECT THICKNESS	<u>(Y)</u> N	
PHOTO REQUIRED	Y <u>(N)</u>	
CORRECT REF # TO LINK CERT	<u>(Y)</u> N	<u>MT: 39334</u>
CORRECT MATERIAL IDENTIFICATION	Y <u>(N)</u>	
CORRECT M# ON THE MATERIAL	Y <u>(N)</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>(N)</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>(N)</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK.  
RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION

ENGINEERING SIGNOFF (if required)

INSPECTED BY: M

SIGNED OFF BY: \_\_\_\_\_

DATE: 18/11/01

DATE: \_\_\_\_\_

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

---

CERTIFICATION DU MATÉRIEL

CLIENT:  
SALABERRY-DE-VALLEYFIELD

ACIER OUELLETTE INC DIV.DE  
935 BOUL DU HAVRE  
SALABERRY-DE-VALLEYFIELD, QUEBEC  
QC J6S 5L1

NUMÉRO DE COMMANDE: 15036615 000020  
COMMANDE DU CLIENT: ac00019994 20  
NUMÉRO DE PIÈCES: 2440  
NUMÉRO DE LIVRAISON: 803899617 000020

NUMÉRO D'ARTICLE: 160001395  
DESCRIPTION INVENTAIRE: FLT EXT 6061 T6511 1.5 X 2 X 144

DESCRIPTION ARTICLE FINIS: ALUM Barre PLTE EXT 6061 T6511  
1.5po X 2po X 144po

NUMERO (S) DE COULÉE BRAME / BOBINE / TIN (le cas échéant)  
17184871A 76763


**CERTIFICATION**

Un sondage de nos sources matérielles a indiqué que ni le mercure ni des substances radioactives ne sont introduits dans leurs produits ni ne sont utilisés dans aucun de leurs procédés. Alors que nous ne faisons aucun test indépendant pour le mercure ou la radiation, il n'y a rien dans le système qui pourrait entraîner la contamination de l'un ou l'autre type.

Ce document certifie que le matériel décrit ci-dessus a été expédié conformément à votre commande. Le producteur du matériel a certifié qu'il a été produit conformément aux spécifications suivantes:

ASTM B221

09/26/2018

  
Thomas Endres  
Vice-président - Approvisionnement



FAL-1122

19994  
52234<sup>2</sup>

Material Test Report

Manifest: 717456

Ticket:  
1755539

Our Order: **882322 - 1**

Cust P.O.: 4500853606

Die: ES05978

Part: 160001395

Alloy Temper: 6061 T6511

Description: 1.500 x 2.000

Print Date: 1/31/18

**Chemical Composition Range**

	<u>Si</u>	<u>Fe</u>	<u>Cu</u>	<u>Mn</u>	<u>Mg</u>	<u>Cr</u>	<u>Zn</u>	<u>Ti</u>	<u>OtherEach</u>	<u>OtherTotal</u>
6061										
Min	0.40		0.15		0.8	0.04				
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15

**Mechanical Properties**

Strength ksi

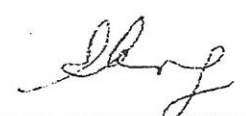
<u>Sample ID</u>	<u>Cast #</u>	<u>Lot #</u>	<u>Test Date</u>	<u>Ultimate Tensile</u>	<u>Yield 2% offset</u>	<u>Elongation 2" gage length</u>
76763	17184871A	A11	1/14/18	45.50	41.74	17.0

Applicable Specifications: ASTM B221-14 AMS-QQ-A200/8A

Country of Origin: ONTARIO, CANADA

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.

heat: 17184871A

  
Evan Eng, Quality Assurance Manager

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL 6061 T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:  
 QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
 OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
 OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TTT | X | WW.WWW | THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
 "WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
 R 2009-09-03  
 MJP

B	REMOVE QD-A-225/8 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (EN 07-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	g	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AJS	DRAWING NO	REV. B
MFG. APPR.	MJP	M6061T6B	SHEET 1 OF 1
APPROVED	MJP	TITLE	SCALE
DE APPR.	MJP	6061-T6 BAR	INTS
DATE	09.07.13	COPYRIGHT © 2001 BY DART AEROSPACE LTD	

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6B 1.500x2.000  
 DATE: 18/11/01

PO / BATCH NO.: P0041482/5123410

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 12ft  
 QUANTITY INSPECTED: 12ft  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500"  
 THICKNESS RECEIVED: 1.500"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y N	ASTM B221
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	LT: 17184871A
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AA</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

2560

FAL-23

18931

**CAN ART**  
ALUMINUM EXTRUSION L.P.

51860

## Material Test Report

Manifest: 336848

Ticket:  
5585837

Our Order: **883277 - 11**      Cust P.O.: C75492  
 Die: ES05977      Part: V832381 ✓  
 Alloy Temper: 6061 T6511 ✓ Description: 2.000 x 3.000  
 Print Date: 3/5/18

### Chemical Composition Range

6061	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	OtherEach	OtherTotal
Min	0.40		0.15		0.8	0.04				
Max	0.8	0.7	0.40	0.15	1.2	0.35	0.25	0.15	0.05	0.15

### Mechanical Properties


Strength ksi

<u>Sample ID</u>	<u>Cast #</u>	<u>Lot #</u>	<u>Test Date</u>	<u>Ultimate Tensile</u>	<u>Yield 2% offset</u>	<u>Elongation 2" gage length</u>
77967	<u>18020701B</u>	A11	2/26/18	41.89	39.57	12.3

Applicable Specifications: ASTMB221-14      AMS-QQ-A200/8A

Country of Origin: ONTARIO, CANADA

Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment.



Evan Eng, Quality Assurance Manager

Heat: 18020701B



# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION:  
QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221

PART NUMBER: M6061T6B | T.TTT | X | WW.WWW  
THICK | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES  
"WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

RELEASED  
R 2009-05-03  
MJP

B	REMOVE QQ-A-225/8 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (2N 07-1)	CP	09 07 13
A	NEW ISSUE	DS	01 06 08
REV.	DESCRIPTION	BY	DATE
DESIGN	DS		
DRAWN			
CHECKED	AJS		
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09.07.13		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6B			
REV. B SHEET 1 OF 1			
TITLE 6061-T6 BAR			
SCALE			
INTS			
COPYRIGHT © 2001 BY DART AEROSPACE LTD			
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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6B2.000x3.000

PO / BATCH NO.: P0041482/S123411

DATE: 18/11/01

MATERIAL CERT REC'D: 46

THICKNESS ORDERED: 2.00"

QUANTITY RECEIVED: 12ft

THICKNESS RECEIVED: 2.00"

QUANTITY INSPECTED: 12ft

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <u>N</u>	
CORRECT FINISH	<u>Y</u> N	
CORROSION	Y <u>N</u>	
CORRECT GRAIN DIRECTION	<u>Y</u> N	
CORRECT MATERIAL PER M-DRAWING	<u>Y</u> N	<u>ASTM B-221</u>
CORRECT THICKNESS	<u>Y</u> N	
PHOTO REQUIRED	Y <u>N</u>	
CORRECT REF # TO LINK CERT	<u>Y</u> N	<u>LT: 18020701B</u>
CORRECT MATERIAL IDENTIFICATION	Y <u>N</u>	
CORRECT M# ON THE MATERIAL	Y <u>N</u>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <u>N</u>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <u>N</u>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

1301

AAL-1118

51328

CA 50159

12928



Global Vietnam Aluminium Co., Ltd GLOBAL VIETNAM ALUMINIUM COMPANY LIMITED

Address: MY XUAN B1-CONAC INDUSTRIAL ZONE, MY XUAN TOWN, TAN THANH DISTRICT,  
BA RIA VUNG TAU PROVINCE, VIET NAM

Tel: +84(0)643924954

Fax: +84(0)643924953

## MILL TEST CERTIFICATE

Date: April 26<sup>th</sup>, 2018

PO number: P-18057

Shipping Ref No.: 18-0817

LC No.: DC HMN811301

Date of issue: April 10, 2018

Item Code: 1022600

Die Number: D00580

Alloy &amp; Temper: 6061-T6

Production Description: ALUMINIUM EXTRUDED PROFILES

Angle 1.0"x0.125"x 20' 6061-T6 D00580

Length (inch): 240

Bundle number: P-18057-021, P-18057-022

Heat Number: SXF180280

Date: 03/03/2018

Applicable Specifications: ASTM B221 STANDARDS

CHEMICAL ANALYSIS: %

) acceptable 9/18/11/1

Si	Mg	Fe	Cu	Mn	Cr	Zn	Ti	Al	Other		Remark:
									EACH	TOTAL	
0.575	0.911	0.228	0.242	0.016	0.100	0.084	0.017	97.741	<0.05	<0.10	28/02/2018

### MECHANICAL ANALYSIS:

Ult. Strength (ksi)	Yield Strength (ksi)	Elongation % LN 2"	Remark:
41.6	36.8	10.6	28/02/2018

All profiles, showing material shipped match aluminium alloy as per standard, with chemical analysis to match aluminium alloy standard.

We hereby certify that the item listed have been checked and tested in accordance with the specifications noted and have been found to meet all the applicable requirements. Certifications are kept on file for 36 months from the date of purchase and are available for review upon request, referring to ASTM and the PO number.

Quality Manager



TRUNG TÂM KIỂM NGHIỆM CÔNG TY  
TINH NHÔM TOÀN CẦU VIỆT NAM  
GLOBAL VIETNAM ALUMINIUM  
CO., LTD TESTING CENTER

heat: SXF180280

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL M6061-T6 HHHXWWWW  
PER AWS-QQ-A-200/8

PART NUMBER: M6061T6A HHHXWWWW WHERE HHH = HEIGHT  
WWW = THICKNESS  
HEIGHT THICKNESS

E.G. 0.75" X 0.75" X 0.125" = M6061T6A750XW125

08.03.17.14P

B	PART NUMBER CALL OUT REWRITTEN	AJS	08.03.06
A	NEW ISSUE	MB	08.02.14
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED	LR		
MFG. APPR.	LR		
APPROVED	LR		
DE APPR			
DATE	08.03.06		

DART AEROSPACE LTD	
HAWKESBURY, ONTARIO, CANADA	
DRAWING NO	REV. B
M6061T6A	SHEET 1 OF 1
TITLE	SCALE
6061-T6 ANGLE	NTS
COPYRIGHT © 2008 BY DART AEROSPACE LTD	
THIS DRAWING IS THE PROPERTY OF DART AEROSPACE LTD. IT IS TO BE USED FOR THE PURPOSES SPECIFIED ONLY. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.	



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061 T6 AL 6000W.125

PO / BATCH NO.: P0041482/5123412

DATE: 08/14/01

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 1.000"

QUANTITY RECEIVED: 20ft

THICKNESS RECEIVED: 1.000"

QUANTITY INSPECTED: 20ft

SHEET SIZE ORDERED: -

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: -

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	See cert
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AK</u>	SIGNED OFF BY: _____
DATE: <u>10/10/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

4965

R4140-414

52315

19685



**NIAGARA  
LASALLE**  
CORPORATION

1412 150th Street  
Hammond IN 46327-1799

# CERTIFICATION

CERTIFICATE	Rev
H189388	2
DATE	
09/20/18	
PAGE	
6	

PURCHASE ORDER <b>B41750</b>	
ORDER <b>980460-1</b>	
CUSTOMER ITEM <b>V015422</b>	ITEM <b>144000240Q04A</b>
GRADE <b>QT4140</b>	SHAPE <b>Round</b>
SIZE <b>4.0000</b>	SIZE MM <b>101.6000 MM</b>
LENGTH <b>20' 0"/24' 0"</b>	LENGTH MM <b>6096 / 7315.2</b>

4140/42 VD-CA/AL-TRT QT-HR-STRESS FREE 115K TS 95K YS (.02% 90K) 16% EL 50% R/A SURFACE HBN 269/321 Spec/Rev: ASME SA193/SA193M GR-B7 Spec/Rev: ASTM A193/A193M-14 GR-B7 Spec/Rev: ASTM A29/A29M-16 Spec/Rev: ASTM A322-13 Spec/Rev: ASTM A434/A434M-15 CL-BC

HEAT		GRAIN PRACTICE		SOURCE / MELTED		CAST		REDUCTION RATIO		DI					
<b>C149271</b>		FINE(5-8)		STEEL DYNAMICS (USA)		BLOOM		11.1:1		5.76					
CHEMISTRY															
C	MN	P	S	SI	NI	CR	MO	CU	AL	V					
0.400	0.870	.009	.016	0.240	0.210	0.960	.210	.260	.026	.001					
N		TE		AS		PB		SE		BI					
.008		N/A		N/A		.001		N/A		N/A					
B		NB		.0003		.0010									
MECHANICAL															
JOB		TENSILE		.2% YIELD		ELONG		R OF A		HARDNESS					
HS48233		146,472 PSI		124,398 PSI		17.60		54.90		HBN = 311					
.02% YIELD		108,943		SR TEMP											
QUENCH & TEMPER															
JOB		MACRO		SURFACE		AUSTENITIZED			TEMPERED			STRESS			
HS48233		SATISFACTORY		HBN = 311		TEMPERATURE		TIME		QUENCH		TEMPERATURE		TIME	
1650F		3.2 HRS		WATER		1150F		6.1 HRS		STRESS FREE					
HARDENABILITY															
01	02	03	04	05	06	08	10	12	14	16	20	24	28	32	
56	56	56	56	56	56	56	53	49	50	47	46	45	43	39	
LOT															
LOT		JOB		WEIGHT (LBS)		PIECES		LOT		JOB		WEIGHT (LBS)		PIECES	
5760048		HS48233		7,735		8									

WE, hereby certify that these goods were produced in compliance with all applicable requirements of sections 6, 7, and 12 of the Fair Labor Standards Act, as amended, and all regulations and orders of the United States Department of Labor issued under section 14 thereof. Material was not exposed to mercury or any metal alloy that is liquid at ambient temperature during processing or while in our possession. No weld repairs performed on the above material.

CERTIFICATE OF TEST

By:

*Walter P. Kretzler*

Walter P. Kretzler - Director of Q.A./Chief Metallurgist

Heat: C149271

## SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL : AISI 4140 ROUND BAR  
MINIMUM ROCKWELL C = 20 Rc  
MAXIMUM ROCKWELL C = 38 Rc

SPECIFICATION : ASTM A29, AMS 6349, AMS 6382, AMS 6529

PART NUMBER : MT-4140-R-ID.DDD]  
WHERE "D.DDD" = DIAMETER IN INCHES  
EX. 4" ROUND BAR = MT-4140-R-4.000

PART NO		REV
MT-4140-R		A
TITLE AISI 4140 ROUND BAR		
DESIGNED BY: VA 11/12/13 DRAWN BY: VA 12/13/2017 CHECKED BY: ML 12/19/2017 MFG REVIEW BY: DP 12/20/2017 APPROVED BY: ML 12/20/2017		
INITIALS AND DATE		
TOLERANCES FRACTIONS ± 1/8 DECIMALS ± .005 ANGLES ± .1 SURFACE ROUGHNESS SCALE: NTS SHEET 1 OF 1		
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APL



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-4140QT-R4.000  
 DATE: 18/11/01

PO / BATCH NO.: P0041482/S123413

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 4E+  
 QUANTITY INSPECTED: 4E+  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 4.000"  
 THICKNESS RECEIVED: 4.000"  
 SHEET SIZE ORDERED: —  
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORROSION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input type="radio"/> N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input type="radio"/> N	<u>ASTM A24</u>
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input type="radio"/> N	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input type="radio"/> N	<u>MT: C149271</u>
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="radio"/> N <input type="radio"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N <input type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N <input type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AK</u> DATE: <u>18/11/01</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

# 9268

PO. 11395

RSS-34114

49/170

Page 01 of 02

Certification Date  
27-NOV-2017CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT

AC00011395

Invoice Number  
T373050

PART NUMBER/NUMÉRO DE PIÈCE

510517

<b>SOLD TO:</b> ACIER OUELLETTE INC.	<b>SHIP TO:</b> ACIER OUELLETTE INC.
<b>VENDU À:</b> DIVISION SALABERRY DE VALLEYFIELD	DIVISION SALABERRY DE VALLEYFIELD
935, BOUL. DU HAVRE	935, BOUL. DU HAVRE
SALABERRY-DE- VALLEYFIELD QC J6S 5L1	SALABERRY-DE- VALLEYFIE QC J6S

Description: 17-4 SOL ANN CF BAR

ASTM A564

3/4 RD X 12" R/L

Line Total: 185 LB

HEAT: 9SG0264-G5011

ITEM: 510517

## Specifications:

AMS 5643 U	ASTM A564 T630 13	ASME SA564 T630 13
ASTM A388/A388M 16	AMS 2303 F	NACE MR0175 09
ISO 15156-1 09*	*EXCEPT FOR H2S	CORROSION TEST)
EN 10204 3.1	ASTM F899 12B	API 6A APPENDIX M
ASTM E340	AMS 2315	ASTM E112

## CHEMICAL ANALYSIS

C	SI	MN	P	S	NI	CR	MO
0.01	0.34	0.62	0.017	0.003	4.69	15.35	0.23
CU	NBTA	NB	TA				
3.30	0.27	0.26	0.005				

RCPT: R201370

COUNTRY OF ORIGIN : TAIWAN

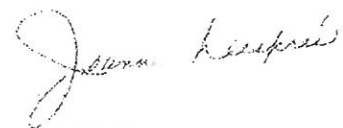
## MECHANICAL PROPERTIES

DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
COND A				IN AREA	BHN
					321
DESCRIPTION	YLD STR	ULT TEN	%ELONG	%RED	HARDNESS
DEV: H900 L	KSI	KSI	IN 02 IN	IN AREA	BHN
	182.0	201.0	17.0	53.0	428

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport n'a pas été en contact avec le mercure pendant sa possession.

MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ

Heat: 9SG0264-G5011

# CERTIFICATE OF TEST CERTIFICAT D'ESSAIS

Page 02 of 02

Certification Date  
27-NOV-2017

CUSTOMER ORDER NUMBER  
NUMÉRO DE COMMANDE DU CLIENT  
AC00011395

Invoice Number  
T373050

PART NUMBER/NUMÉRO DE PIÈCE  
510517

SOLD TO:	ACIER OUELLETTE INC.	SHIP TO:	ACIER OUELLETTE INC.
VENDU À:	DIVISION SALABERRY DE VALLEYFIELD	EXPÉDIÉ À:	DIVISION SALABERRY DE VALLEYFIELD
	935, BOUL. DU HAVRE		935, BOUL. DU HAVRE
	SALABERRY-DE- VALLEYFIELD QC J6S 5L1		SALABERRY-DE- VALLEYFIE QC J6S

Description: 17-4 SOL ANN CF BAR  
3/4 RD X 12' R/L

ASTM A564  
Line Total: 185 LB

HEAT: 9SG0264-G5011 ITEM: 510517

GRAIN SIZE :8 -

MATERIAL IS FREE FROM MERCURY CONTAMINATION  
NO WELD REPAIR PERFORMED ON MATERIAL  
ULTRASONIC: YES  
THERMAL TREATMENT: OK  
SOLUTION TREATMENT: 1900 +/-25 DEG F FOR 30 MIN/INCH  
(MINIMUM OF 1/2 HOUR), RAPIDLY COOLED TO BELOW 90  
DEG F  
MACRO: OK  
MICRO: OK  
AMS NO :2303  
SEVERITY :0.0  
FREQUENCY:0.0

## COMMENTS

red. ratio 279.6:1  
17-4 is the same with aisi 630  
free from residual radioactivity

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.  
The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

*Joanne Despres*

MANAGER QUALITY ASSURANCE  
GÉRANT DE L'ASSURANCE QUALITÉ

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 17-4 PH / S17400 / TYPE 630 SS ROUND BAR  
GRAIN MUST BE ALONG LENGTH OF BAR  
MINIMUM YIELD STRENGTH PER TABLE  
MINIMUM ULTIMATE STRENGTH PER TABLE

SPECIFICATION: AMS 5643 OR ASTM A564  
PART NUMBER: M17-4- HHHH- R X XXX | COND O.D. | WHERE: HHHH SPECIFIES THE MATERIAL CONDITION (PER TABLE BELOW)  
X.XXX = DIAMETER (IN INCHES)

MATERIAL CONDITION TABLE:

CODE	CONDITION	MIN YIELD TENSILE STRENGTH (KSI)	MIN ULTIMATE TENSILE STRENGTH (KSI)
(OMITTED)	NONE SPECIFIED (CONDITION A NOT ACCEPTABLE)	100	150
H900	H900	170	190
H925	H925	155	170
H1025	H1025	145	155
H1075	H1075	125	145
H1100	H1100	115	140
H1150	H1150	105	135
CONDA	CONDITION A (SOLUTION TREATED)		

NOTES: MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR TENSION OR SHEAR APPLICATIONS IN COLD WEATHER CONDITIONS  
MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR APPLICATIONS WHERE STRESS CORROSION CRACKING IS POSSIBLE  
CONDITION A NOT TO BE USED IN DESIGN FOR FINAL PRODUCT AND SHOULD ALWAYS BE HEAT TREATED

EXAMPLES:

PART NUMBER  
4.000" DIAMETER BAR MIN UTS = 150 KSI, MIN YTS = 100 KSI  
2.500" DIAMETER BAR H900 CONDITION  
3.250" DIAMETER BAR H1025 CONDITION  
0.750" DIAMETER BAR A CONDITION

RELEASED  
2017-10-31  
EAM17-728

APPROVED

C	ADDED MATERIAL CONDITION (CIR17-107)	NO	17.09.14
B	REFORMAT DWG. S17400 TYPE 630 ADDED TO PURCHASE MATERIAL (ZN DB-1), ADD A564 SPEC (CB-1), REF PAR 00-020A	VS	10.05.20
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN	NO	NO	
DRAWN	NO	NO	
CHECKED	CP	CP	
MFG. APPR.	RA	RA	
APPROVED	WM	WM	
DE APPR.	CP	CP	
DATE	17.09.14		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M17-4-R			
TITLE 17-4 SS ROUND BAR			
SCALE NTS			
SHEET 1 OF 1			
REV. C			
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## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M17-4R0.750

PO / BATCH NO.: P2041482/S123416

DATE: 18/11/01

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.750"

QUANTITY RECEIVED: 24.67L

THICKNESS RECEIVED: 0.750"

QUANTITY INSPECTED: 24.67L

SHEET SIZE ORDERED: —

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	(Y) N	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	(Y) N	
CORRECT MATERIAL PER M-DRAWING	(Y) N	ASTM A564
CORRECT THICKNESS	(Y) N	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	(Y) N	MT: 9560264-G5011
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>18/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



08/06/2018 2984

FEH-11648

Printable Test Report

S1311

TRA 2354

ArcelorMittal Dofasco G.P.  
P.O. Box 2460  
Hamilton, Ontario  
L8N 3J5  
Purchase Order/Bon de Commande  
G\_50344\_5 MAY  
Bill of Lading/Connaissance  
743475  
Sold To/Vendu A  
LES ACIERS TRANSBEC (1997) LTEE  
4054 LE COURBUSIER, SUITE 201  
LAVAL, QC.  
H7L 5R2

TEST REPORT  
RAPPORT D'ESSAI

Page 1 of 1

Customer/Client  
612995  
Sales Order/Bon de Commande  
HS2 360644013  
Packing Slip/Bordereau de Charge  
Vehicle or Carrier/Vehicule ou Transporteur

Attention: [NAME]  
Fax: [FAX]  
Date: 05/11/2018

Vendor/Vendeur

Spec/Norm et Spec.  
ASTM A1011/A1011M CS TYPE B (17a)  
STANDARD THICKNESS TOLERANCE  
STANDARD UNEXPOSED SURFACE  
MATERIAL CERTIFICATION REQUIRED

Material Description/Description du Material  
HOT ROLLED STEEL SHEET  
COMMERCIAL STEEL  
COILS  
MILL EDGE  
PLAIN DRY  
1150 MIN 1230 X 48 X COIL  
WEIGHT: 43350 LBS  
Country of Origin/Pays d'Origine  
CANADA  
Test Methods/Methods d'Essai  
ASTM E1019, E415

HEAT	C	Mn	P	S	Si	Cu	Ni	Cr	Sn	Mo	Als	Alt	Cb	V	Ti	Ca	N	B	O
COULEE																			
152886-04	.17	.006	.004	.04	.11	.03	.08	.013	.01	.032	.033	.0008	.003	.020	.001	.0060	.0002		
SERIAL NUMBER	LIFT #																		
NOMBRE DE SERIE	FARDEAU																		
P63238/00	4302640																		

152886-04

We Certify That The Material Described Herein Conforms To The Specification Shown On This Document  
ArcelorMittal Dofasco G.P. as per John Duric, CMTL Supervisor  
The Results Relate Only To The Items Tested  
This Report Shall Not Be Reproduced Except In Full Without The Expressed Written Approval of The CMTL Supervisor.

---

This Contract Is Subject To The Terms And Conditions Of Sale Shown On The Order Acknowledgement.  
Ce Contrat est Sujet aux Termes et Conditions de Vente Indiqués Sur l'Accuse de Reception de Commande.



DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. M1010-S	REV A SHEET 1 OF 1
DATE 01.06.13		TITLE 1010-1025 SHEET	SCALE NTS
A	01.06.13	NEW ISSUE	
A1	04.03.09 <i>[Signature]</i>	ADD ASTM A1008 AND COLD ROLLED	

PURCHASE MATERIAL :

ASTI 1010-1025 OR ASTM A36 /A366/A1008  
OR CSA G40-21, 38W/44W/50W/60W/70W

MINIMUM YIELD TENSILE STRENGTH = 28 ksi

MINIMUM ULTIMATE TENSILE STRENGTH = 42 ksi

COLD ROLLED

PART NUMBER:

M1010-S TT/GA WHERE TT = GAUGE THICKNESS  
GA

EG. 16 GAUGE STEEL = M1010-S16 GA

RELEASED  
01.06.13 *[Signature]*

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## MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M10105.125  
 DATE: 1/8/11/01

PO / BATCH NO.: P0041482/5123398

MATERIAL CERT REC'D: Yes  
 QUANTITY RECEIVED: 32sf  
 QUANTITY INSPECTED: 32sf  
 QUANTITY REJECTED: 32sf

THICKNESS ORDERED: 0.125"  
 THICKNESS RECEIVED: 0.125"  
 SHEET SIZE ORDERED: 4'x8'  
 SHEET SIZE RECEIVED: 4'x8'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N	
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	152886
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>1/8/11/01</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



#5354

RCR-6-V

47916

Macsteel Bright Bar

A Division of

Macsteel Service Centers SA (Pty) Limited

Reg No. 2005/016292/07 Vat No. 4430554206

P.O. Box 120 Meyerton 1960

Seymour Road, Industrial Sites, Meyerton

South Africa



BRIGHT BAR

49096

12-Sep-17

## CHEMICAL ANALYSIS CERTIFICATE

TO: LES ACIERS TRANSBEC (1997) LTEE

6 " 152.40MM C1018

PO # CA47916 LOT4 REF 170647C ASTM A108 - 13

CAST No.	C. %	Si. %	Mn. %	S. %	P. %	Pb. %
1702492	0.160	0.250	0.720	0.003	0.014	

On behalf of Macsteel Bright Bar

01.02 PM

heat: 1702492

## SPECIFICATION CONTROL DRAWING

### PURCHASE MATERIAL:

HOT ROLLED STEEL ROUND BAR

### SPECIFICATION:

ASTM A36 OR ASTM A1011 OR 44W OR ASTM A1018

### PART NUMBER:

MT-HRS-R-[D.DDD]

### EXAMPLE:

MT-HRS-R-0.250

WHERE D.DDD IS DIAMETER IN INCHES

TOLERANCES PER MANUFACTURER SPECIFICATIONS

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
A	NEW ISSUE		07/09/2017	SAC	WM
B	CORRECTED DRAWING NUMBER IN TITLE BLOCK	17-B45	06/10/2017	SAC	WM



TITLE  
HOT ROLLED STEEL ROUND BAR

DESIGN BY:	SAC 07/09/2017	XXX 1 455	FRACTIONS 1/16	REV	B
DRAWN BY:	SAC 10/06/2017	XX	XX	1 455	1 455
CHECKED:	VLM 10/10/2017	1 455	1 455	1 455	1 455
MFG. APPR:	DP 10/11/2017	1 455	1 455	1 455	1 455
APPROVED:	WAVM 10/12/2017	1 455	1 455	1 455	1 455
DATE:	06/10/2017	1 455	1 455	1 455	1 455
SCALE:	NTS	1 455	1 455	1 455	1 455
WEIGHT:	N/A LBS	1 455	1 455	1 455	1 455
3. DIMENSIONAL LIMITS APPLY		1 455	1 455	1 455	1 455

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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: MT-MRS-R-6000  
DATE: 18/11/01

PO / BATCH NO.: P0041482/S123414

MATERIAL CERT REC'D: Yes  
QUANTITY RECEIVED: 2ft  
QUANTITY INSPECTED: 2ft  
QUANTITY REJECTED: 2ft

THICKNESS ORDERED: 6.000"  
THICKNESS RECEIVED: 6.025"  
SHEET SIZE ORDERED: —  
SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	<input checked="" type="checkbox"/> Y N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y N	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N	
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y N	HT: 1702492
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

*testers located in the Quality Office*

<b>QC 18 INSPECTION</b>		<b>ENGINEERING SIGNOFF (if required)</b>	
INSPECTED BY: <u>AT</u>		SIGNED OFF BY: _____	
DATE: <u>18/11/01</u>		DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in